



AFAQ SUN SERIES

Lesson Plans Mathematics

5

Total: SLO = 73

Total: LPs = 210



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 1**

Unit Name: _____ **Topic:** Orientation **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Introduce themselves and get to know about their teacher and class-fellows.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask the students: How are you? Encourage them to say, “Alhamdulillah”.

Welcome students to their new classroom.

Start with ‘Bismillah’ and tell them to recite it before starting any work.

Main Activities/Concept Building: (30 mins)

Activity 1:

Greet your students, introduce yourself and ask their name as well. Your introduction should be concise and brief. Here is some information you may share.

Personal Biography: Name, place of birth, hobbies, sports, and recreational interests.

Teaching Biography: How many subjects/classes have you taught? Which subject are you going to teach?

Next, help students know about each other. Although they are familiar with most of their class-fellows, still it will help them socialize more among their peers. Have students introduce themselves by sharing their names, date of birth, their interests, etc. Have them take turns to talk about themselves. Clap for them.

Sum Up: (0 mins)

N/A

Assessment: (0 mins)

N/A

Homework: (5 mins)

Distribute the worksheet (Introducing Myself) among students and ask them to fill it at home.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

Introducing Myself

- My name is _____.
- I am _____ years old.
- My birthday is on _____.
- I live in _____.
- The school's name is _____.
- I study in Grade _____.
- My teacher's name is _____.
- My favourite subject is _____.
- I have _____ siblings.
- My favourite colour is _____.
- My favourite sport is _____.
- My favorite food is _____.
- My hobby is _____.
- I want to become a/an _____.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 2**

Unit Name: _____ **Topic:** Recalling **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Recall their previous knowledge about the concept of numbers.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about the worksheet they got for homework.

Next ask a few questions relevant to “Numbers” they learnt in grade 4.

Tell students that they are going to revise and practice the main concepts by solving a worksheet.

Main Activities/Concept Building: (30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 mins)

N/A

Homework: (0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Write the following numbers in words.

a) 673,908

b) 126,943

c) 556,234

2. Write these numbers in figures.

a) One hundred twenty-two thousand and two hundred.

b) Seven hundred and ninety-nine thousand and one

c) Seven hundred two thousand, five hundred and thirty-seven

3. Write the value of the underlined digit in each of these numbers.

a) 234,817 _____

b) 509,824 _____

c) 236,100 _____

4. Write the following numbers in expanded form.

d) 109,245

e) 627,134

f) 233,888

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 3**

Unit Name: Whole Numbers and operations **Topic: Numbers up to one million** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Read numbers up to 1,000,000 (one million) in numerals and words.

Write numbers up to 1,000,000 (one million) in numerals and words.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 1 and 5

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write a few 5 or 6-digit numbers on the board. Point out any of the digits and ask them about its value/place value. Then ask them to read that number. Appreciate their responses.

Main Activities/Concept Building: (25 mins)

Activity 1:

Ask them to open their textbooks to page 1. Ask them to look at the picture and the question given on the page. Ask them if they can answer it. Take responses and tell them that they will get to know the answer after completing this topic.

Draw a place value chart with place values up to hundred thousand. Write a number in it and explain the place value and value of each digit in it. Now, add one more column and write another digit in it (write 7 unique digits so that the students may not get confused for the similar digits’ values.). Tell them that now the table has numbers in millions. Explain how to read this number using the place value chart. Then write it in words on the board by placing commas. Tell them that we put commas after every 3 digits from the right. Explain how a place value chart helps us read the numbers correctly.

Repeat this activity using different numbers and explain how to read and write them. Also, explain to them how to write that number in standard form and expanded form.

Sum Up: (3 mins)

Sum up the lesson by retelling about reading and writing numbers in millions using place values. Also discuss with them about the answer of question given on page 1.

Assessment: (5 mins)

Ask them to solve Q1 of Learning Check 1.1 at page 5.

Homework: (2 mins)

Solve Q2 (a, b, c) and Q3 (a, b, c) of Learning Check 1.1 at page 5.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 4**

Unit Name: Whole Numbers and operations **Topic: Numbers up to one million** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Read numbers up to 1,000,000 (one million) in numerals and words.

Write numbers up to 1,000,000 (one million) in numerals and words.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 2,3 and 5, Place value cards (up to million)

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them to open their textbooks to page 2 and observe the table given (for numbers 999, 999 and 1,000,000). Ask them to read the numbers and talk about the value of each digit. Correct them if required.

Main Activities/Concept Building: (25 mins)

Activity 1:

Have students open page 3. Explain the given examples by drawing the table on the board. Explain how to read and write any number using place values.

Activity 2:

Distribute place value cards (up to million) among the students. Call a student to the front and ask him/her to write a random 7-digit number on the board. Ask him/her to point out any digit of the number. The remaining students have to hold and show the correct card of that place. Next, call another student and ask him/her to read that number loudly. Remaining students will check if he/she is reading it correctly or not. Similarly, another student will write that number in words and the remaining students will check if he/she has written it correctly or not. Repeat these activities with other students as well.

Sum Up: (3 mins)

Sum up the lesson by explaining the “Notable Notes” given on page 2 and explain through place value.

Assessment: (5 mins)

Ask them to solve Q2 (d, e, f) and Q3 (d, e, f) of Learning Check 1.1 at page 5.

Homework: (2 mins)

Solve Q4 (a, b, c) of Learning Check 1.1 at page 5.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Place Value Cards



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 5**

Unit Name: Whole Numbers and operations **Topic: Numbers up to one million** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Read numbers up to 1,000,000 (one million) in numerals and words.

Write numbers up to 1,000,000 (one million) in numerals and words.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 2, 3, 4 and 5

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Read statement of “Quick check” from page 2 and 3. Ask them to solve it in their notebooks. Take their responses and appreciate them. Correct them if required.

Main Activities/Concept Building: (25 mins)

Activity 1:

Arrange two sets of numbers. One set has number cards of any 7-digit numbers in words and the other set has the same number in figures. Distribute number cards among students. Call any student to the front and ask him/her to show his/her card to the class. The student with the same number (in words or figures) will come forward and they will pin the numbers (in words and figures) on the softboard. Also, ask them to write that number in standard form and expanded form. Similarly, repeat this activity till all the numbers are paired correctly.

Activity 1:

Sum Up: (3 mins)

Have students open page 3 and 4. Explain the given examples by drawing the table on the board. Explain the given “Notable Note”

Assessment: (5 mins)

Read statement of “Quick check” from page 4 and 5. Ask them to solve it in their notebooks.

Homework: (2 mins)

Solve Q4 (d, e, f) and Q5 of Learning Check 1.1 at page 5.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 6**

Unit Name: Whole Numbers and Operations **Topic: Addition and Subtraction (up to 6 digits)** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Add and subtract numbers up to 6-digit numbers.

Solve real-life situations involving operations of addition and subtraction.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 6 and 9, Wallchart of addition/subtraction clue words

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write two random 5-digit numbers on the board. Call one student to the board and ask him/her to add these. Also ask him/her to explain the steps of addition. Appreciate him/her and help if required.

Main Activities/Concept Building: (22 mins)

Activity 1:

Have students open page 6 of their textbooks. Read the statement of the given example. Talk about the importance of charity and the reward of participating in building a masjid. Next, explain the statement of the example. Refer to the clue words by pasting the wallchart of addition clue words (or by simply writing them on the board). Tell them that here we need to find the total amount of Irtaza spent. For this we need to add. Now, tell students when we add two numbers, first we line up the numbers, ones under ones, tens under tens, hundreds under hundreds, thousands under thousands and so on. After this, we add the same place digits together. If there is a need of regrouping, we regroup and carry forward. Solve the example step by step. Label the addends, sum, subtrahend, minuend and difference as well. In part b, explain the steps to subtract. Use the clue words by referring to the wallchart. Encourage them to ask questions if they want.

Activity 2:

Sum Up: (3 mins)

Sum up the lesson by explaining the steps of addition and subtraction and repeating the terms associated with these operations.

Assessment: (8 mins)

Ask them to solve Q1 (a, b) and Q2 (a, b) of Learning Check 1.2 at page 9.

Homework: (2 mins)

Solve Q1 (c, d, e, f) and Q2 (c, d, e, f) of Learning Check 1.2 at page 9.

Teacher’s Self-Evaluation:

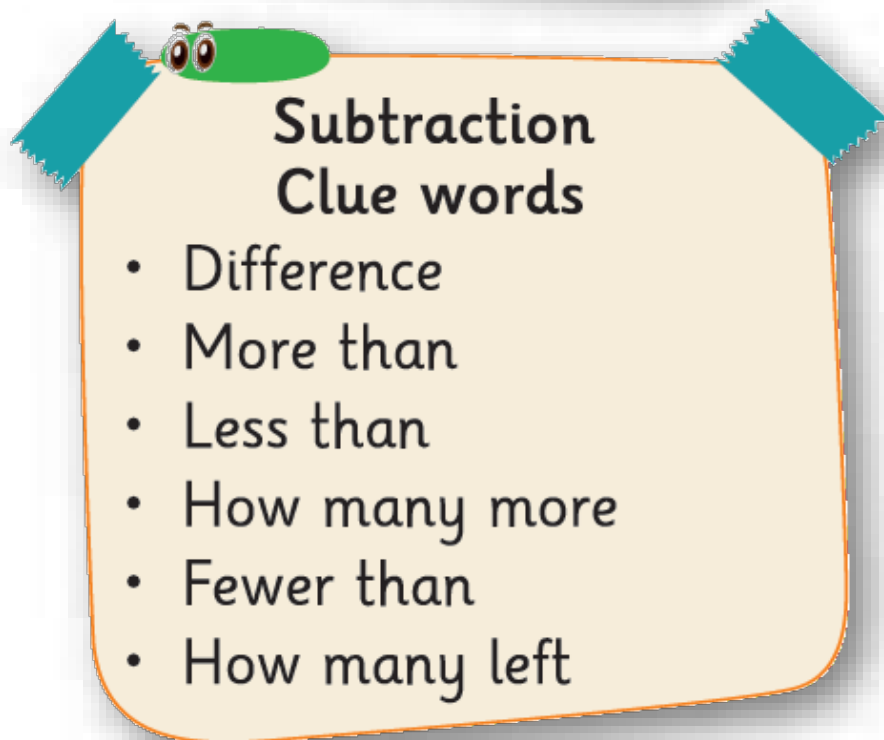
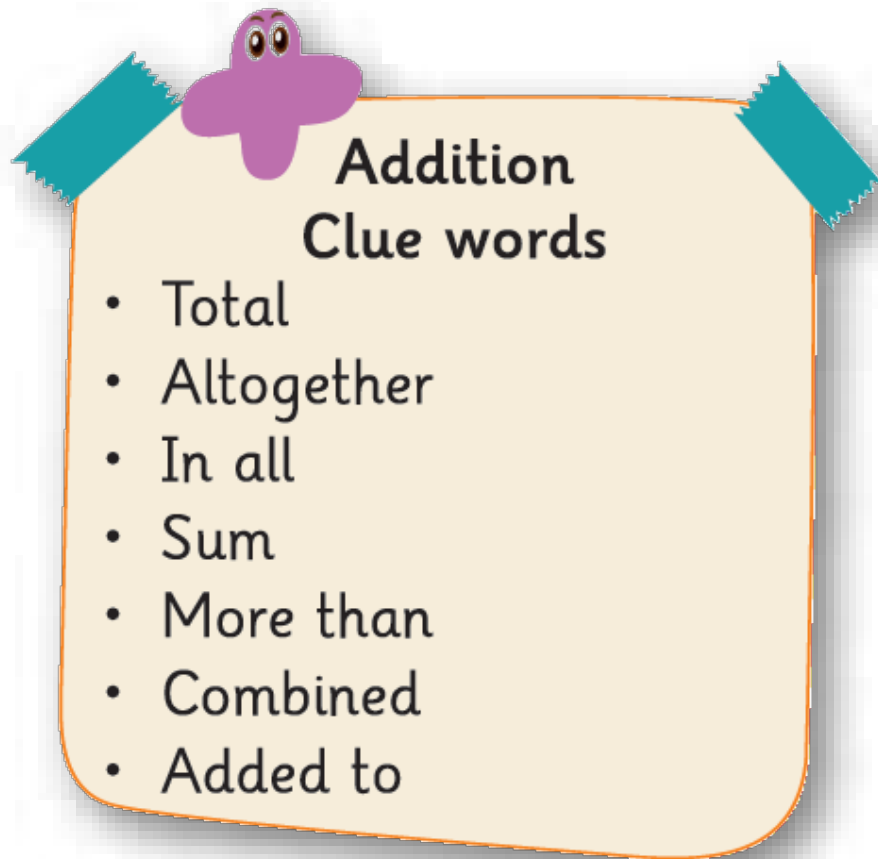
Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 7**

Unit Name: Whole Numbers and Operations **Topic: Addition and Subtraction (up to 6 digits)** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Add and subtract numbers up to 6-digit numbers.

Solve real-life situations involving operations of addition and subtraction.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 7 and 9

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write one addition and one subtraction sum (solved) on the board. Point towards each term of the sums and ask students to name that term (addends, sum, subtrahend, minuend, difference). Appreciate them for their correct answers.

Main Activities/Concept Building: (20 mins)

Activity 1:

Have students open page 7 of their textbooks. Read the statement of the given example. Explain the statement of the example. Refer to the clue words by pasting the wallchart of addition/subtraction clue words (or by simply writing them on the board). Solve the example step by step. Label the addends, sum, subtrahend, minuend and difference as well. In part b, explain the steps to subtract. Encourage them to ask questions if they want.

Similarly explain the procedure step by step to solve the last 2 examples on page 7 of their textbooks.

Sum Up: (3 mins)

Sum up the lesson by repeating the main points of the concept.

Assessment: (10 mins)

Read statement of “Quick check” from page 7. Ask them to solve it in their notebooks.

Solve Q1 (g, h) and Q2 (g, h) of Learning Check 1.2 at page 9.

Homework: (2 mins)

Solve Q3 and 4 of Learning Check 1.2 at page 9.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 1**

Unit Name: Whole Numbers and Operations **Topic: Addition and Subtraction (up to 6 digits)** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Add and subtract numbers up to 6-digit numbers.

Solve real-life situations involving operations of addition and subtraction.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 8, 9, 10

Teaching & Learning Activities:

Opening Activities/Warm-up: (3 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Read statement of “Quick checks” from page 8. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Main Activities/Concept Building: (22 mins)

Activity 1:

Divide students into 3 groups. Give them blank papers and ask them to create word problems involving addition and subtraction. After they are done, exchange the papers with other groups. The groups will solve each problem step by step. When done, each group will come forward and explain the word problem and its solution. The group with the best presentation and accurate solution will be the winner.

Sum Up: (8 mins)

Sum up the lesson by explaining the procedure step by step to solve the examples on page 8 of their textbooks. Also explain the Notable Notes.

Assessment: (5 mins)

Solve Q5 of Learning Check 1.2 at page 9.

Homework: (2 mins)

Solve Q6 and 7 of Learning Check 1.2 at page 10.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 2**

Unit Name: Whole Numbers and Operations **Topic: Multiplication by 10, 100 and 1000** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply numbers up to 6 digit by 10, 100, and 1000.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 10,11,15

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask the students to multiply the numbers:

$17 \times 10 = \underline{\hspace{2cm}}$, $17 \times 100 = \underline{\hspace{2cm}}$, $17 \times 1000 = \underline{\hspace{2cm}}$

Ask them: What do you notice about the above products?

Take responses and appreciate them for their effort.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Ask students to open their textbooks at page 10. Read the statement of the example given. Explain that the price of a laptop is given and we need to calculate the price of 10 laptops. Solve the example step by step.

Explain the associated terms “multiplicand, multiplier and product” using the Notable Note on page 10.

Then explain that to quickly multiply a whole number by 10, we simply put a zero to the right of the multiplicand. Similarly, explain the examples given on page 11 by telling students about the rules given in Notable Notes on page 11.

Sum Up:

(3 mins)

Sum up the lesson by explaining the rules to multiply whole numbers by 10, 100 and 1000.

Assessment:

(5 mins)

Read statement of “Quick checks” from page 11. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Homework:

(2 mins)

Solve Q1 and 3 of Learning Check 1.3 at page 15.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 3**

Unit Name: Whole Numbers and Operations **Topic: Multiplication by 10, 100 and 1000** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply numbers up to 6 digit by 10, 100, and 1000.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 12,15, Two baskets, Number cards

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about the rules to multiply whole numbers by 10, 100 and 1000. Appreciate them if they correctly respond.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Put two baskets on the table. One basket will have multiple whole number cards and the other basket will have 3 cards with “____ x 10”, “____ x 100”, and “____ x 100”. Call students one by one and ask them to pick one card from each basket randomly. For example, he/she picks the card with the number 52 from one basket and “x 100” from the other basket. He/she will have to quickly multiply 52 by 100 by recalling the rules and will write the answer “5200” on the board. Remaining students will check if the answer is correct or not. Repeat this activity till all students have their turns.

Sum Up:

(3 mins)

Sum up the lesson by explaining the example “multiply 2657 by 10, 100, 1000” given on page 12.

Assessment:

(5 mins)

Read statement of “Quick checks” from page 12. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Homework:

(2 mins)

Solve Q4 of Learning Check 1.3 at page 15.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 2

Lesson Plan: 4

Unit Name: Whole Numbers and operations

Topic: Multiplication of Numbers up to 5 digits

Date:

Objective(s):

At the end of this period, the students will be able to:

Multiply numbers up to 6-digit by a number up to 3-digit numbers.

Solve real-life situations involving operations of multiplication.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 12, 13, 15, Multiplication clue words wallchart

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write two 2-digit numbers and two 3-digit numbers on the board. Call a random student and ask him/her to select any two numbers from the numbers written and multiply on the board. Encourage students to explain the steps of multiplication.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students open page 12 of their textbooks. Read the statement of the given example. Explain the statement of the example. Refer to the clue words by pasting the wallchart of multiplication clue words (or by simply writing them on the board). Tell them that here we need to find the total number of paper clips.

For this, we need to multiply 11390 by 56. Label the multiplicand, multiplier and product as well.

Tell them that the multiplication steps are the same as we did in the previous grade, just be careful with the digits.

First, multiply the multiplicand (11390) by each digit (5 and 6) of the multiplier (56) separately and then add the results. Similarly, write any other two numbers and multiply on the board by explaining each step. Encourage them to ask questions if they want.

$$\begin{array}{r}
 11,390 \\
 \times \quad 56 \\
 \hline
 68,340 \\
 569,500 \\
 \hline
 637,840
 \end{array}$$

Arrows point from the intermediate results to boxes on the right:

- 68,340 is labeled 11390×6
- 569,500 is labeled 11390×5
- 637,840 is labeled $68340 + 569500$

Sum Up:

(3 mins)

Sum up the lesson by explaining the terms related to multiplication and the algorithm for multiplying numbers.

Assessment:

(5 mins)

Read statement of "Quick check" from page 13. Ask them to solve part (a) in their notebooks.

Appreciate them for their correct answers.

Homework:

(2 mins)

Solve Q2 (a, b, c, d, e) of Learning Check 1.3 at page 15.

Teacher's Self-Evaluation:

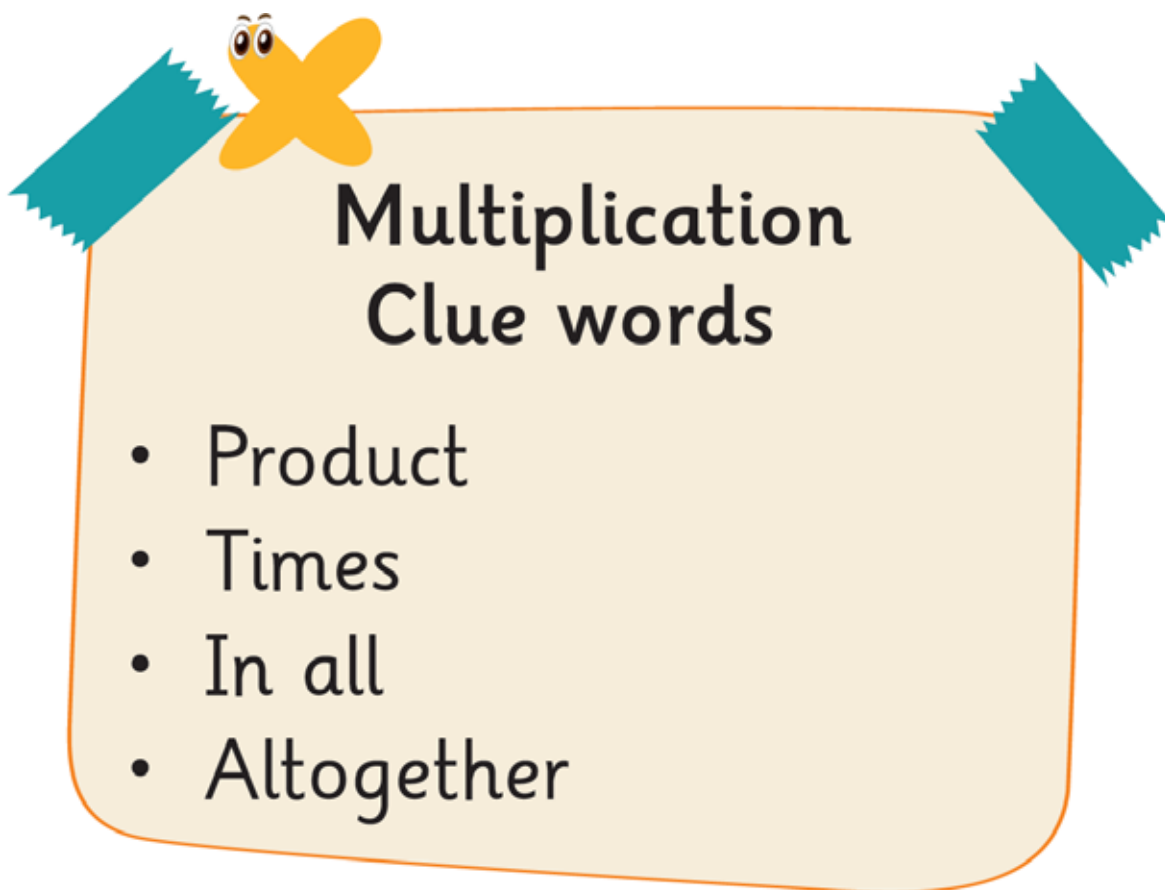
Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 5**

Unit Name: Whole Numbers and operations **Topic: Multiplication of Numbers up to 5 digits** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply numbers up to 6-digit by a number up to 3-digit numbers.

Solve real-life situations involving operations of multiplication.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 12,13 and 15, 2 baskets, Number cards

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write two 2-digit and two 3-digit numbers on the board. Solve it with the help of students by asking them to raise their hands and tell the steps for solving it. Then ask them to label the terms as “multiplicand, multiplier and product”.

Main Activities/Concept Building: (25 mins)

Activity 1:

Have students open page 12 and 13 of their textbooks. Solve examples (multiply 76420 by 342/269352 by 584) by explaining each step on the board. Retell them that to multiply two numbers, split the multiplier in expanded form. Then multiply each digit of the multiplicand by each value of the multiplier separately. Finally add the results.

Activity 2:

Put two baskets on the table. One basket will have multiple 5-digit number cards and the other basket will have 3-digit number cards. Call students one by one and ask them to pick one card from each basket randomly and multiply them step by step on the board. Remaining students will check if he/she is solving it correctly or not. Repeat this activity till all students have their turns.

Sum Up: (3 mins)

Sum up the lesson by explaining the terms related to multiplication and the algorithm for multiplying numbers.

Assessment: (5 mins)

Read statement of “Quick check” from page 13. Ask them to solve part (b, c) in their notebooks.

Appreciate them for their correct answers.

Homework: (2 mins)

Solve Q2 (f, g, h, i) and Q5 of Learning Check 1.3 at page 15.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 6**

Unit Name: Whole Numbers and operations **Topic: Multiplication of Numbers up to 5 digits** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply numbers up to 6 digit by a number up to 3-digit numbers (using box method).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 14 and 15, 2 baskets, Number cards

Teaching & Learning Activities:

Opening Activities/Warm-up: (3mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write one 5-digit number and one 3-digit number on the board. Solve it and then ask the students to label the terms as “multiplicand, multiplier and product”.

Main Activities/Concept Building: (22 mins)

Activity 1:

Write 8234×657 on the board. Ask students to verbally tell the steps to solve it. Tell them that there is another interesting method to solve multiplication problems which is called “the box method”. Explain to them about stepwise algorithm to use the box method of multiplication.

Step I: Write the numbers in expanded form.

$$8234 = 8000 + 200 + 30 + 4$$

$$657 = 600 + 50 + 7$$

Step II: Write one number horizontally and the other number vertically in a table or grid as given below:

Step III: Multiply each number in the horizontal boxes with the number in the vertical boxes and write the product in the given boxes.

×	8000	200	30	4
600	4800000	120000	18000	2400
50	400000	10000	1500	200
7	56000	1400	210	28

Step IV: Add all the products. This sum will be the product of 8234 and 657.

$$4800000 + 120000 + 18000 + 2400 + 400000 + 10000 + 1500 + 200 + 56000 + 1400 + 210 + 28 = 5409738.$$

$$\text{So, } 8234 \times 657 = 5409738$$

Solve a few more sums using the box method. Encourage students to ask questions if they need to.

Sum Up: (3 mins)

Sum up the lesson by explaining the stepwise algorithm of multiplying numbers using the box method.

Assessment: (10 mins)

Read statement of “Quick check” from page 14. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Homework: (2 mins)

Solve Q2 (a, c, f, i) of Learning Check 1.3 at page 15 by using the box method.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 7**

Unit Name: Whole Numbers and operations **Topic: Division by 10, 100 and 1000** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Divide a number up to 5 digits by 10, 100 and 1000.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 16, 17 and 20

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write the following question on the board.

$567 \div 21$

Ask them to copy it in their notebooks and solve. Check their work and correct them if needed.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Ask students to open their textbooks at page 16. Read the statement of the example given. Explain that the total number of books and the number of cupboards is given and we need to calculate the number of books in each cupboard. Solve the example step by step. Explain the associated terms “dividend, divisor, remainder and quotient” using the Notable Notes on page 16. Then explain that to quickly divide a whole number (having 0 at ones place) by 10, we simply remove the zero from the right of the dividend. Similarly, explain the examples given on page 17 by telling students about the rules given in Notable Notes. Additionally, write a few other numbers and divide them by 10, 100 and 1000.

Sum Up:

(3 mins)

Sum up the lesson by explaining the rules to divide whole numbers by 10, 100 and 1000.

Assessment:

(5 mins)

Read statement of “Quick Check” from pages 16-17. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Homework:

(2 mins)

Solve Q1(a, b, c, d) of Learning Check 1.4 at page 20.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 1**

Unit Name: Whole Numbers and operations **Topic:** Division by 10, 100 and 1000 **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a number up to 5 digits by 10, 100 and 1000.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 18 and 20, Two baskets, Number cards

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Write the following division sums on the board.

$450 \div 100 = \underline{\hspace{2cm}}$, $700 \div 1000 = \underline{\hspace{2cm}}$

Ask them: What do you notice about the above sums? Can these be solved using the rules of division you learnt the previous day? If not, why? Take responses and appreciate them for their effort.

Main Activities/Concept Building: (25 mins)

Activity 1:

Put two baskets on the table. One basket will have multiple whole number cards and the other basket will have 3 cards with “ $\underline{\hspace{1cm}} \div 10$ ”, “ $\underline{\hspace{1cm}} \div 100$ ”, and “ $\underline{\hspace{1cm}} \div 1000$ ”. Call students one by one and ask them to pick one card from each basket randomly. For example, he/she picks the card with the number 71000 from one basket and “ $\div 100$ ” from the other basket. He/she will have to quickly divide 71000 by 100 by recalling the rules and will write the answer “710” on the board. Remaining students will check if the answer is correct or not. Repeat this activity till all students have their turns.

Sum Up: (3 mins)

Sum up the lesson by explaining the rules of division.

Assessment: (5 mins)

Read statement of “Quick Check” from page 18. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Homework: (2 mins)

Solve Q1 (e, f, g, h, i) of Learning Check 1.4 at page 20.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 3

Lesson Plan: 2

Unit Name: Whole Numbers **and operations** **Topic:** Division of Numbers up to 5 digits **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide numbers up to 5 digits by a number up to 2 digits.

Solve real-life situations involving operations of division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 18 and 20, Division clue words wallchart

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them to write a division sum on their notebooks and label its associated division terms.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students open page 18 of their textbooks. Read the statement of the given example. Talk about the importance of charity. Explain the statement of the example. Refer to the clue words by pasting the wallchart of division clue words (or by simply writing them on the board). Tell them that here the total amount and number of needy people is given. We need to find the amount each person will get. For this, we need to divide 98450 by 15.

Tell them that the division steps are the same as we did in the previous grade, just be careful with the digits. Solve the example on the board by explaining each step. Take the first digit of the dividend. Then divide it by the divisor and write the answer on top as the quotient. Subtract the result from the digit and write the difference below. Bring down the next number (if present). Repeat the same process until all digits are done and the remainder is less than the divisor. Encourage them to ask questions if they need to. Label the dividend, divisor, quotient and remainder as well.

$$\begin{array}{r}
 6563 \\
 15 \overline{) 98450} \\
 \underline{-90} \\
 84 \\
 \underline{-75} \\
 95 \\
 \underline{-90} \\
 50 \\
 \underline{-45} \\
 5
 \end{array}$$

Sum Up:

(3 mins)

Sum up the lesson by explaining the terms related to division and the algorithm for dividing numbers.

Assessment:

(5 mins)

Read statement of “Quick Check” at the end of page 18. Ask them to solve it in their notebooks.

Appreciate them for their correct answers.

Homework:

(2 mins)

Solve Q2 (a, b, c, d, e) of Learning Check 1.4 at page 20.

Teacher’s Self-Evaluation:

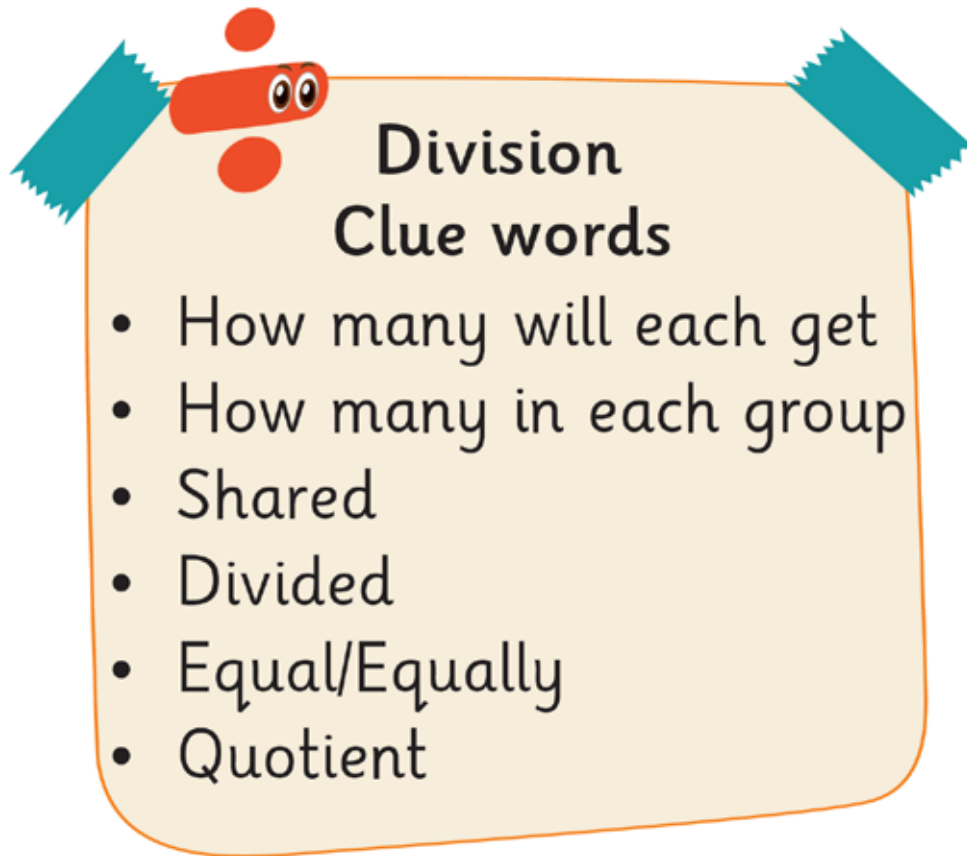
Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 3**

Unit Name: Whole Numbers and operations **Topic:** Division of Numbers up to 5 digits **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide numbers up to 5 digits by a number up to 2 digits.

Solve real-life situations involving operations of division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 19 and 20, 2 baskets, Number cards

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write a division sentence on the board. Solve it with the help of students by asking them to raise their hands and tell the steps for solving it. Then ask them to label the terms as dividend, divisor, quotient and remainder.

Main Activities/Concept Building: (25 mins)

Activity 1:

Have students open page 19 of their textbooks. Solve examples by explaining each step on the board. Keep dividing and bringing down the next number until all digits are done and the remainder is less than the divisor.

Activity 2:

Put two baskets on the table. One basket will have multiple 5-digit number cards and the other basket will have 3-digit number cards. Call students one by one and ask them to pick one card from each basket randomly and divide them step by step on the board. Remaining students will check if he/she is solving it correctly or not. Repeat this activity till all students have their turns.

Sum Up: (3 mins)

Sum up the lesson by explaining the terms related to division.

Assessment: (5 mins)

Read statement of "Quick Check" from page 19. Ask them to solve part (a) in their notebooks.

Appreciate them for their correct answers.

Homework: (2 mins)

Solve Q2 (f, g, h, i) and Q3 of Learning Check 1.4 at page 20.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 3

Lesson Plan: 4

Unit Name: Whole Numbers and operations

Topic: Division of Numbers up to 5 digits

Date:

Objective(s):

At the end of this period, the students will be able to:

Divide numbers up to 5 digit by a number up to 2 digits.

Solve real-life situations involving operations of division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 19,20

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write a division sentence on the board. Solve it with the help of students by asking them to raise their hands and tell the steps for solving it. Then ask them to label the terms as dividend, divisor, quotient and remainder.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students open page 20 of their textbooks. Solve Q4 on the board two times. Each solution must have at least two mistakes. Divide the class into pairs. Ask them to point out the mistakes in both solutions (students must solve the questions in order to figure out the mistake). Then ask each pair to come to the front and explain the mistakes to other students till all pairs have their turns. Appreciate for their correct responses.

Sum Up:

(3 mins)

Sum up the lesson by explaining the mistakes and their solutions again.

Assessment:

(5 mins)

Read statement of "Quick Check" from page 19. Ask them to solve part (b-c) in their notebooks.

Homework:

(2 mins)

Solve Q5 of Learning Check 1.4 at page 20.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 5**

Unit Name: Whole Numbers and operations

Topic: Number Patterns

Date:

Objective(s):

At the end of this period, the students will be able to:

Identify and apply a pattern rule to determine missing elements for a given pattern.

Identify the pattern rule of a given increasing and decreasing pattern and extend the pattern for the next three terms

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 21, 22 and 26

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write the following patterns on the board.

a) 13, 16, 19, _____, _____, _____

b) 26, 21, 16, _____, _____, _____

Ask them to complete these patterns in their notebooks. When they are done, call them randomly and ask about the rules of these patterns. Also ask if these are increasing or decreasing patterns. Take responses and appreciate them for their effort.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students open page 21 of their textbooks. Read the statement of the given example. Talk about the importance of walking for good health. Explain the statement of the example. As they are already familiar with addition and subtraction patterns, ask them to verbally explain how to solve this example. Take random responses and write them on the board. After this, point out the correct responses written on the board. Explain the method to find the next terms of the pattern. Repeat the definitions and terms associated with patterns (pattern, terms, rule, increasing and decreasing patterns) by using the given example. Similarly, write a few more patterns of addition or subtraction on the board. Explain that first we need to find the rule of the pattern and then find the next terms with the help of that rule. Complete the patterns and encourage them to ask questions if they need to.

Sum Up:

(3 mins)

Sum up the lesson by explaining the basic associated terms and the method to find the terms of the pattern.

Assessment:

(5 mins)

To check their understanding, ask them:

- What is a pattern?
- How do you find the next term in a pattern?

Appreciate them for their correct answers.

Ask them to solve "Quick Check" given on page 22.

Homework:

(2 mins)

Solve Q1 (a, b) of Learning Check 1.5 at page 26.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 6**

Unit Name: Whole Numbers and operations

Topic: Number Patterns

Date:

Objective(s):

At the end of this period, the students will be able to:

Identify and apply a pattern rule to determine missing elements for a given pattern.

Identify the pattern rule of a given increasing and decreasing pattern and extend the pattern for the next three terms.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 22, 23, 26

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write the following pattern on the board.

13, 18, 23, ____, ____, ____.

Ask them to complete the patterns in their notebooks. When they are done, call them randomly and ask about the rule of this pattern. Also ask if it is an increasing or a decreasing pattern. Take responses and have students open page 22 of their textbooks. Ask them to look at the solution given and check if they have done it correctly or not.

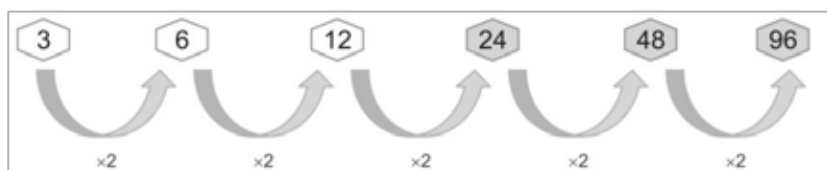
Main Activities/Concept Building:

(25 mins)

Activity 1:

Read the statement of the given example (3, 6, 12, ____, ____, ____) on page 22 of their textbooks. Ask them to tell if they know how to solve this example. Take random responses and write them on the board.

After this, point out the correct responses written on the board. Solve it and tell them that this pattern is not an addition or subtraction pattern. Tell them that this is a multiplication pattern as every next term is obtained by



multiplying the previous term by 2. Write another multiplication pattern and solve it by explaining each step.

Similarly, explain the examples of addition and division patterns given on page 23. Complete the patterns and encourage them to ask questions if they need to.

Sum Up:

(3 mins)

Sum up the lesson by explaining the basic associated terms and the method to find the terms of multiplication and division patterns.

Assessment:

(5 mins)

Ask them to solve first "Quick Check" given on page 23.

Homework:

(2 mins)

Solve Q1 (c, d, e) of Learning Check 1.5 at page 26.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 3

Lesson Plan: 7

Unit Name: Whole Numbers and operations

Topic: Number Patterns

Date:

Objective(s):

At the end of this period, the students will be able to:

Identify and apply a pattern rule to determine missing elements for a given pattern.

Identify the pattern rule of a given increasing and decreasing pattern and extend the pattern for the next three terms.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 23 and 26, Basket, Rule cards

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write one multiplication and one division pattern on the board.

Ask them to complete the patterns in their notebooks. When they are done, call them randomly and ask about the rule of this pattern. Also ask if it is an increasing or a decreasing pattern.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Put a basket of cards on the table. The cards will have the rules of addition, multiplication, subtraction and division patterns written on them. Call students one by one and ask them to pick one card from each basket randomly, go back to his/her seat and make a pattern according to that rule in their notebook. For example, if he/she picks the card with rule "Multiply by 10", he/she will have to create a pattern satisfying this rule. Repeat this activity till all students have their turns. Next, call them to the front to show their rule card and the pattern they created. Clap for their correct patterns and correct if needed.

Add 8

Divide by 6

Subtract 12

Multiply by 5

Sum Up:

(3 mins)

Sum up the lesson by explaining the basic associated terms and the method to find the terms of patterns.

Assessment:

(5 mins)

Ask them to solve last "Quick Check" given on page 23.

Homework:

(2 mins)

Solve Q1 (f, g) of Learning Check 1.5 at page 26.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 4

Lesson Plan: 1

Unit Name: Whole Numbers and operations

Topic: Number Patterns

Date:

Objective(s):

At the end of this period, the students will be able to:

Describe the pattern found in a given table or chart.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 24, Laminated hundreds wallchart

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Write the following patterns on the board.

1, 12, 23, ____, ____, ____

93, 83, 73, ____, ____, ____

Ask them to complete the patterns in their notebooks. When they are done, call them randomly and ask about the rule of these patterns. Also ask if they are increasing or decreasing patterns.

Main Activities/Concept Building:

(30 mins)

Activity 1:

Hang the laminated hundreds wallchart on the board or wall. Use an erasable marker and encircle the given numbers as shown in the image. Ask students to observe the numbers and tell what they notice. Take their responses. If someone notices a pattern, appreciate him/her. Then tell them that a pattern of addition has been encircled (which was asked in warm up activity).

1, 12, 23, ____, ____, ____.

Tell them that it's an increasing pattern of addition. Ask them to tell the rule of this pattern. Take responses and tell them that the rule here is to add 11 and write the next three terms of the pattern on the board.

1, 12, 23, 34, 45, 56.

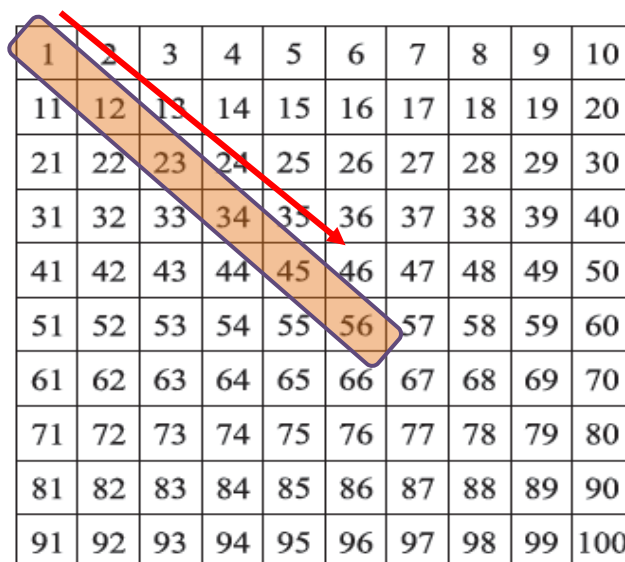
Again, encircle the given numbers as shown in the image. Ask students to observe the numbers and tell what they notice. Take their responses. If someone notices a pattern, appreciate him/her. Then tell them that a pattern of subtraction has been encircled (which was asked in warm up activity).

93, 83, 73, ____, ____, ____.

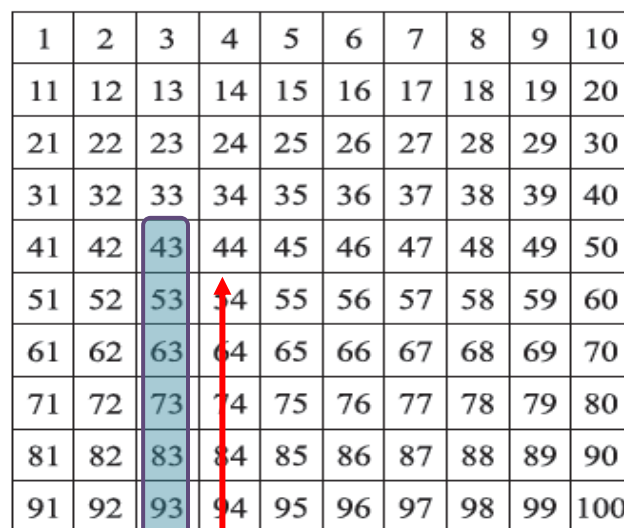
Tell them that it's a decreasing pattern of subtraction. Ask them to tell the rule of this pattern. Take responses and tell them that the rule here is to subtract 10 and write the next three terms of the pattern on the board.

93, 83, 73, 63, 53, 43.

Similarly, highlight a few other patterns on the hundreds chart and ask students to identify the rules. Encourage them to ask questions if they need to.



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Sum Up: (3 mins)

Sum up the lesson by explaining the patterns and their rules in the hundreds chart given on page 24.

Assessment: (0 mins)

N/A

Homework: (2 mins)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 2**
Unit Name: Whole Numbers and operations **Topic:** Number Patterns **Date:**

Objective(s):

At the end of this period, the students will be able to:

Describe the pattern found in a given table or chart.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 24 and 27, Laminated hundreds wallchart

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Hang the laminated hundreds wallchart on the board or wall.

Encircle a few additions or subtraction patterns. Ask students to identify the rule of the patterns.

Main Activities/Concept Building: (25 mins)

Activity 1:

Divide the class into two teams; Team A and Team B. Encircle a pattern on the hundreds chart. Call one student from Team A and ask him/her to observe the encircled pattern and identify the rule. If he/she correctly answers, Team A will score 5 marks. If he/she answers incorrectly, give them -5 marks. Similarly, repeat the activity for another pattern with a student from Team B. Repeat till all students have their turns. At the end, the team with the higher score wins.

Sum Up: (3 mins)

Sum up the lesson by repeating the basic terms associated with patterns.

Assessment: (5 mins)

Ask them to solve “Quick Check” given on page 24.

Homework: (2 mins)

Solve Q2 of Learning Check 1.5 at page 27.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 3**

Unit Name: Whole Numbers and operations

Topic: Number Patterns

Date:

Objective(s):

At the end of this period, the students will be able to:

Describe the pattern found in a given table or chart.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 25 and 27, Glass or plastic jar, 3 pencils

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions related to number patterns.

“What is a pattern?”

“What is the difference between increasing and decreasing patterns?”

“How do you figure out the rule of any pattern?”

Take responses and appreciate them for their effort.

Main Activities/Concept Building:

(30 mins)

Activity 1:

Put a transparent glass or plastic jar on the table with 3 pencils in it.

Make sure it is clearly visible to all the students. Draw a t-chart on the board as shown in the figure. Label one column as “Number of students” and the other one as “Number of pencils”.

Call 5 students to the front and ask to bring their pencils with them. Ask 1 student to put his/her pencil in the jar. Ask remaining class, “How many students put their pencil in the jar?” They will probably say “1”. Write 1 in the first column. Again ask, “How many pencils are there now?”. They will probably say “4”. Write 4 in the second column.

Similarly, ask the second student to put his/her pencil in the jar. Ask students, “How many students have put their pencils in the jar?” They will probably say “2”. Write 2 in the first column. Again ask, “How many pencils are there now altogether?”. They will probably say “5”. Write 5 in the second column.

Repeat this activity till all 5 students have their turns. Ask them, “How many pencils will there be if 8 students each put one pencil in the jar? Ask students to explain how do they know. Take their responses. Explain to the class that this is an example of an addition pattern. Then, define the pattern’s rule. Write “Add 3” on the board. Encourage them to ask questions if they need to.

Number of students	Number of pencils
1	4
2	5
3	6
4	7
5	8

Sum Up:

(3 mins)

Sum up the lesson by repeating the basic terms associated with patterns.

Assessment:

(0 mins)

N/A

Homework:

(2 mins)

Solve Q3(a) of Learning Check 1.5 at page 27.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 4

Lesson Plan: 4

Unit Name: Whole Numbers and operations

Topic: Number Patterns

Date:

Objective(s):

At the end of this period, the students will be able to:

Describe the pattern found in a given table or chart.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 25 and 27, Glass or plastic jar, 3 pencils

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Draw a table on the board. Ask students to observe it and identify the rule of the pattern found in the table.

Take responses and appreciate them for their effort.

Number (In)	Result (Out)
14	10
16	12
18	14
20	16

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students to open page 25 of their textbooks. Draw tables given on the board and explain how to find the rule for the patterns in them. Explain each step on the board.

Tell them that:

- In table 1, the pattern follows the rule “Multiply by 4” because for each car there are four wheels.
2 cars have 8 wheels ($2 \times 4 = 8$), 3 cars have 12 wheels ($3 \times 4 = 12$), and so on.

Rule: Multiply by 4	
Cars	Wheels
2	8
3	12
4	16
5	20
6	24

- In table 2, the pattern follows the rule “Add 5” because by adding 5 to each number (in), we get the result (out).
 $12 + 5 = 17$, $13 + 5 = 18$, and so on.

Rule: Add 5	
Number (In)	Result (Out)
12	17
13	18
15	20
18	23
20	25

- In table 3, the pattern follows the rule “Subtract 12” because by subtracting 12 from each number (in), we get the result (out).
 $56 - 12 = 44$, $42 - 30 = 12$, and so on.

Rule: Subtract 12	
Number (In)	Result (Out)
56	44
42	30
36	24
24	12
14	2

- In table 4 on page 26, the pattern follows the rule “Divide by 2” because by dividing each number (in) by 2, we get the result (out).
 $64 \div 2 = 32$, $24 \div 2 = 12$ and so on.

Rule: Divide by 2	
Number (In)	Result (Out)
64	32
24	12
30	15
20	10
10	5

Encourage them to ask questions if they need to.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Sum Up: (3 mins)

Sum up the lesson by repeating the method to find the rules of patterns given in tables.

Assessment: (5 mins)

Ask them to solve Q3(b) of Learning Check 1.5 at page 27.

Homework: (2 mins)

Solve Q3 (c, d) of Learning Check 1.5 at page 27.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 4

Lesson Plan: 5

Unit Name: Whole Numbers and operations

Topic: Summary and Review Exercise

Date:

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the unit whole numbers (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 28 and 29

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Whole Numbers”.

Ask them a few questions to let them revise the basic concepts:

- What is the smallest 6-digit number?
- What is the greatest 7-digit number?
- Read the number 2,367,980.
- What is the place value of 7 in 2,789,980?
- What is an addend?
- What is a subtrahend?

Main Activities/Concept Building:

(30 mins)

Activity 1:

Have students open page 28-29 of their textbooks. Ask them to solve Q1, Q2 and Q3 of “Unit Check 1” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up:

(3 mins)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 28.

Assessment:

(0 mins)

N/A

Homework:

(2 mins)

Solve Q4 and Q5 of “Unit Check 1” given at page 29.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 4

Lesson Plan: 6

Unit Name: Whole Numbers and operations

Topic: Summary and Review Exercise

Date:

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the unit whole numbers (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 29

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Whole Numbers”.

Ask them a few questions to let them revise the basic concepts:

- Define a multiplicand.
- What is a dividend?
- Define a remainder.

Main Activities/Concept Building:

(30 mins)

Activity 1:

Have students open page 29 of their textbooks. Ask them to solve Q6 of “Unit Check 1” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up:

(3 mins)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 28.

Assessment:

(0 mins)

N/A

Homework:

(2 mins)

Solve Q7 of “Unit Check 1” given at page 29.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 4

Lesson Plan: 7

Unit Name: Whole Numbers and operations

Topic: Summary and Review Exercise

Date:

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the unit whole numbers (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 29 and 30

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Whole Numbers”.

Ask them a few questions to let them revise the basic concepts:

- What is a pattern?
- What are increasing patterns?
- Define the terms of a pattern.

Main Activities/Concept Building:

(30 mins)

Activity 1:

Have students open page 29 and 30 of their textbooks. Ask them to solve Q8 and Q9 of “Unit Check 1” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up:

(3 mins)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 28.

Assessment:

(0 mins)

N/A

Homework:

(2 mins)

Revise classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 1

Unit Name: Whole Numbers and operations

Topic: Summary and Review Exercise

Date:

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the unit whole numbers (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 30

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Whole Numbers”.

Ask them a few questions to let them revise the basic concepts:

- What is a multiplier?
- State clue words for division.
- State clue words for addition.
- Define quotient.
- State clue words for subtraction.
- State clue words for multiplication.

Main Activities/Concept Building:

(30 mins)

Activity 1:

Have students open page 30 of their textbooks. Ask them to solve Q10 and Q11 of “Unit Check 1” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up:

(3 mins)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 28.

Assessment:

(0 mins)

N/A

Homework:

(2 mins)

Solve Q12 and Q13 of “Unit Check 1” given at page 30.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 2

Unit Name: Whole Numbers and operations

Topic: Revision (Numbers)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of numbers up to 1,000,000 of the unit “Whole Numbers”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to numbers up to 1,000,000.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Write the following numbers in words.

a) 8,672,936

b) 7,270,902

c) 4,002,168

2. Write these numbers in figures.

3. Nine million, five hundred and eighty-one thousand, three hundred and seven.

4. One million, three hundred and twenty-two thousand and fifty-one.

5. Eight million, two hundred and ninety-nine thousand, three hundred and thirty.

6. Write the value of the underlined digit in each of these numbers.

a) 5209678 _____

b) 9145628 _____

c) 7800245 _____

7. Write the following numbers in expanded form.

a) 8,920,234

b) 1,772,092

c) 4,300,719

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 3

Unit Name: Whole Numbers and operations

Topic: Revision (Addition)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of Addition of the unit “Whole Numbers and operations”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to Addition.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Add the following.

a) $293,789 + 625,723$

b) $192,580 + 672,873$

2. Find the sum of the greatest 6-digit number and the smallest 6-digit number. Also label addends and sum.

3. Saeed earned Rs 172,355 in January and Rs 605,700 in February. How much did he earn in two months altogether?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 4

Unit Name: Whole Numbers and operations

Topic: Revision (Subtraction)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of Subtraction of the unit “Whole Numbers and operations”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to Subtraction.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Subtract the following.

a) $673,125 - 490,922$

b) $520,987 - 412,055$

2. Find the difference of the greatest 6-digit number and the smallest 6-digit number. Also label subtrahend, minuend and difference.

3. The population of Town A is 728,963 and that of Town B is 734,999.

a) Find the difference in their population.

b) What is their total population?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 5

Unit Name: Whole Numbers and operations

Topic: Revision (Multiplication)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of Multiplication of the unit “Whole Numbers and Operations”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to Multiplication.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Multiply the following.

a) $8,873 \times 10$

b) $67,256 \times 100$

c) $10,562 \times 1000$

d) 7256×267

e) $98,002 \times 31$

f) $72,623 \times 218$

2. There are 72 containers carrying 4575 packs of juice each. If another container is carrying 3050 more packs of juice, find the total number of packs of juice altogether.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 6

Unit Name: Whole Numbers and operations

Topic: Revision (Division)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of Division of the unit “Whole Numbers and Operations”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to Division.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Divide the following.

a) $7620 \div 10$

b) $12,700 \div 100$

c) $42,000 \div 1000$

d. $3421 \div 18$

e) $72,458 \div 51$

f) $82,076 \div 33$

2. The cost of 31 chairs is Rs 62,620. Find:

- The cost of one such chair.
- The cost of 40 such chairs.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 1

Periodic Unit: 1

Week: 5

Lesson Plan: 7

Unit Name: Whole Numbers and operations

Topic: Revision (Patterns)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of Patterns of the unit “Whole Numbers and Operations”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to Patterns.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Identify the rules for the following patterns and write the next three terms.

a) 7, 10, 13, _____, _____, _____

Rule: _____

b) 8, 16, 32, _____, _____, _____, _____

Rule: _____

c) 29403, 9801, 3267, _____, _____, _____

Rule: _____

d) 766, 750, 734, _____, _____, _____

Rule: _____

2. Look at the hundreds chart. Find, colour and write the rule for at least 3 patterns.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

3. Observe the following tables and find the rule for each pattern found in them.

Rule: _____	
Number (In)	Result (Out)
23	46
24	48
25	50
26	52
27	54

Rule: _____	
Number (In)	Result (Out)
140	120
230	210
333	313
500	480
772	752

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 1**

Unit Name: LCM and HCF **Topic: HCF by prime factorization method** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find HCF of two and three numbers up to 2 digits using prime factorization method.

Solve real-life situations involving HCF.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 31, 32 and 36

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask the students: How are you? Encourage them to say, “Alhamdulillah”.

Start with ‘Bismillah’ and tell them to recite it before starting any work.

Ask students: Do you know about factors and multiples? How we can find factors and multiples of numbers? Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (25 min)

Activity 1:

Have students open their textbooks to page 31. Ask them to look at the picture and the question given on the page. Ask them if they can answer it. Take their responses and tell them that they will learn the answer after completing this topic.

Have students open their textbook to page 32. Ask them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that we have to find the maximum possible capacity of a water container that completely measures the amount of 15 litres, 30 litres and 90 litres. Tell them that for this, we find the HCF of the given numbers. Ask them: Do you know about HCF? Take their response and tell them that we find the factors of the given numbers and the highest common factor is called HCF. Tell them that there are two methods to find the HCF of numbers. One is called prime factorization method and the other is division method. Now we find the HCF of 15, 30 and 90 by prime factorization method. Solve the HCF of these numbers step by step on the board and explain it to students.

Now ask them to solve the example step by step in their notebooks again. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by retelling students about the steps to find the HCF of the given numbers. Also discuss with them about the answer of the question given on page 31.

Assessment: (5 min)

To assess the learning of the students, ask them to write two 2-digit numbers in their notebooks and find the HCF of these numbers.

Homework: (2 min)

Solve Q1 (a-d) of “Learning Check 2.1” at page 36 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 2**

Unit Name: LCM and HCF

Topic: HCF by prime factorization method

Date:

Objective(s):

At the end of this period, the students will be able to:

Find HCF of two and three numbers up to 2 digits using prime factorization method.

Solve real-life situations involving HCF.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 33, 34 and 36

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about the worksheet they got for homework.

Ask students: How many methods are there to find the HCF of two or more numbers?

What is meant by HCF?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building:

(30 min)

Activity:

Have students open their textbook to page 33. Tell them that there is another method that is called factor tree method to find the HCF of numbers. Tell them that in the factor tree method, we find the prime factors of the number in tree form and then by finding the common factors of these prime factors, we find the HCF or highest common factor of the given numbers. Now find the factors of the numbers 24 and 30 of example 2 by factor tree method on the board step by step and explain it to students.

Ask students to solve the examples given on pages 33 and 34 in the textbook in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up:

(3 min)

Sum up the lesson by retelling the students about the clue words that are used for HCF. Explain to them Notable Notes given on page 34.

Assessment:

(5 min)

To assess the students, ask them to solve the "Quick Check" given on page 34 of the textbook in their notebooks. Roam around the class, check their work and correct them if needed.

Homework:

(2 min)

Solve Q1 (e-h) of "Learning Check 2.1" at page 36 of the textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 3**

Unit Name: LCM and HCF **Topic: HCF by prime division method** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find HCF of two and three numbers up to 2 digits using division method.

Solve real-life situations involving HCF.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 35 and 37

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask students to tell how we can find the HCF of numbers by prime factorization method and factor tree method. Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (20 min)

Activity 1:

Have students open their textbooks to page 35. Tell them that there is another way to find the HCF of numbers that is called division method. In division method, first we divide the greater number by the smaller number. Then divide the divisor by the remainder obtained in step 1 and then again divide the divisor by the remainder in step 2. Now solve the example step by step on the board and explain it to them.

Ask them to solve example 2 on page 36 of the textbook in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by explaining the steps of finding HCF by division method.

Assessment: (10 min)

To assess the learning of the students, ask them to solve “Quick Check” on page 35 of the textbook in their notebooks.

Homework: (2 min)

Solve Q2 of “Learning Check 2.1” of the textbook on page 37 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 4**

Unit Name: HCF and LCM **Topic: HCF by division method** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find HCF of two and three numbers up to 2 digits using division method.

Solve real-life situations involving HCF.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 37, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask students to tell how we can find the HCF of numbers by division method. Take their responses and appreciate them for their good work.

Main Activities/Concept Building: (25 min)

Activity 1:

Call a student to the front of the class. Instruct him/her to write two 2-digit numbers on the board. Ask him/her to find the HCF of the given numbers by division method step by step on the board. Ask the rest of the class to check the work and correct it if needed.

Call random students one by one to the front of the class and ask them to write the numbers and then find the HCF of the numbers by division method. Take their responses and appreciate them for their good work.

Activity 2:

Give them worksheet and ask them to solve the worksheet by following instruction. Roam around the class, check their work and talk about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining how to find the HCF of two or more numbers by division method.

Assessment: (5 min)

To assess the students learning, ask them to tell how we can find the HCF of the numbers by division method. Ask them to solve Q3 of “Learning Check 2.1” at page 37 of the textbook in their notebooks.

Homework: (2 min)

Solve Q4 of Learning Check 2.1 at page 37.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find HCF of the following numbers by division method.

a) 40 and 35

b) 72 and 84

c) 12, 18 and 24

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 5**

Unit Name: HCF and LCM **Topic: HCF by division method** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find HCF of two and three numbers up to 2 digits using division method.

Solve real-life situations involving HCF.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 37, 2-digit number cards

Teaching & Learning Activities:

Opening Activities/Warm-up: (8 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them to tell the steps to find the HCF of two or more numbers by division method. Take their responses and tell them the steps.

Main Activities/Concept Building: (22 min)

Activity 1:

Make pairs of students. Give each pair two or three number cards of 2-digit numbers. Instruct them to find the HCF of the numbers by using division method. Roam around the class and check their work. Ask them to raise their hands when finished. Now call one pair of students to the front and ask them to present their work to the whole class. Ask the rest of the class to check their working and point out if there is any mistake and to correct it. Repeat the same activity with other pairs of students. Appreciate them for their active participation.

Activity 2:

Ask student to make real life situation of finding HCF. Ask them when done then share their problems with each other. Now call one by one each student to the front of the class and ask him/her to share their problems to the whole class. Appreciate them for their good work.

Sum Up: (3 min)

Sum up the lesson by retelling students about the method to find the HCF of two or more numbers by division method.

Assessment: (5 min)

Ask them to write three 2-digit numbers in their notebooks and find HCF of the numbers by division method. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q5 of Learning Check 2.1 at page 37.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 6**

Unit Name: LCM and HCF **Topic: LCM by Prime factorization method** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find LCM of two and three numbers up to 2 digits using prime factorization method.

Solve real-life situations involving LCM.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 37, 38 and 42

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask students: Do you know about multiples and common multiples? Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (25 min)

Activity 1:

Have students open their textbooks to page 37. Ask them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that we have to find the minimum number of balloons that can be exactly distributed among 36 and 72 kids. Tell them that for this, we find the LCM of the given numbers. Ask them: Do you know about LCM? Take their response and tell them that when we find the prime factors of the given numbers and then the smallest number which is divisible by each of the given numbers is called LCM. Tell them that there are two methods to find the LCM of numbers. One is called prime factorization method and the other is division method. Now we find the LCM of 36 and 72 by prime factorization method. Tell them that first we find the prime factors of 36 and 72 then find the common prime factor and non-common prime factors and at the end to find the LCM we find the product of common and non-common prime factors. Solve the example step by step on the board and explain it to students.

Now ask them to solve the example step by step in their notebooks again. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by retelling students about the steps to find the LCM of the given numbers.

Assessment: (5 min)

To assess the learning of the students, ask them to write two 2-digit numbers in their notebooks and find the LCM of the numbers.

Homework: (2 min)

Solve Q1 (a-d) of “Learning Check 2.2” at page 42 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 7**

Unit Name: LCM and HCF **Topic: LCM by Prime factorization method** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find LCM of two and three numbers up to 2 digits using prime factorization method.

Solve real-life situations involving LCM.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 38-42

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about the worksheet they got for homework.

Ask students: How many methods are there to find the LCM of two or more numbers?

What is meant by LCM?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building:

(25 min)

Activity:

Have students open their textbooks to page 38. Tell them that there is the factor tree method to find the LCM of numbers. Tell them that in the factor tree method, we find the prime factors of the number in tree form and then by finding common and non-common prime factors of the prime factors, we find the LCM or least common multiples of the given numbers. Now find the factors of the numbers 4 and 12 of example 2 by factor tree method on the board step by step and explain it to students.

Ask students to solve the examples given on pages 39, 40 and 41 in the textbook in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up:

(3 min)

Sum up the lesson by retelling the students about the clue words that are used for LCM. Explain to them Notable Notes given on pages 38 and 39.

Assessment:

(5 min)

To assess the students, ask them to write any two or three 2-digit numbers in their notebooks and find LCM of the numbers by factor tree method. Roam around the class, check their work and correct them if needed.

Homework:

(2 min)

Solve Q1 (e-h) of “Learning Check 2.2” at page 42 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 1**

Unit Name: LCM and HCF **Topic: LCM by Division method** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find LCM of two and three numbers up to 2 digits using division method.

Solve real-life situations involving LCM.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 41, 42 and 43

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask students to tell how we can find the LCM of numbers by prime factorization method and factor tree method. Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (25 min)

Activity 1:

Have students open their textbooks to page 41. Tell them that there is another way to find the LCM of numbers that is called division method. Now solve example 1 on the board and tell them that to find the LCM of 16 and 20 by division method. To find the LCM by division method, we follow some steps. In step 1, write the numbers in a horizontal line separating them by commas. Then we divide them by a prime number which exactly divides at least two of the given numbers. Divide the given numbers by 2. Put the quotients 8 and 10 in the next row under the numbers 16 and 20 and we continue the process until all quotients are 1. Explain each step to students and find the LCM of 20 and 16 that is the product of all prime factors of the number 16 and 20.

2	16, 20
2	8, 10
2	4, 5
2	2, 5
5	1, 5
	1, 1

LCM = product of all prime numbers

LCM = $2 \times 2 \times 2 \times 2 \times 5 = 80$

Ask them to solve example 2 on page 42 of the textbook in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by explaining the steps of finding LCM by division method.

Assessment: (5 min)

To assess the learning of the students, ask them to solve “Quick Check” on page 42 of the textbook in their notebooks.

Homework: (2 min)

Solve Q2 of “Learning Check 2.2” of the textbook on page 43 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 2**

Unit Name: HCF and LCM **Topic: LCM by Division method** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find LCM of two and three numbers up to 2 digits using division method.

Solve real-life situations involving LCM.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 42 and 43

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask students to tell how we can find the LCM of the numbers by division method. Take their responses and appreciate them for their good work.

Main Activities/Concept Building: (25 min)

Activity 1:

Call a student to the front of the class. Instruct him/her to write two 2-digit numbers on the board. Ask him/her to find the LCM of the given numbers by division method step by step on the board. Ask the rest of the class to check the work and correct it if needed.

Call random students one by one to the front of the class and ask them to write the numbers and then find the LCM of the numbers by division method. Take their responses and appreciate them for their good work.

Ask students to open their textbook to page 42 and solve example 3 in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by explaining how to find the LCM of two or more numbers by division method.

Assessment: (5 min)

To assess the students learning, ask them to tell how we can find the LCM of the numbers by division method. Ask them to solve Q3 of “Learning Check 2.2” at page 43 of the textbook in their notebooks.

Homework: (2 min)

Solve Q4 of Learning Check 2.2 at page 43.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 3**

Unit Name: LCM and HCF **Topic: LCM by Division Method** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find LCM of two and three numbers up to 2 digits using division method.

Solve real-life situations involving LCM.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 43, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them to tell the steps to find the LCM of two or more numbers by division method. Take their responses and tell them the steps.

Main Activities/Concept Building: (22 min)

Activity 1:

Make pairs of students. Give each pair two or three number cards of 2-digit numbers. Instruct them to find the LCM of the numbers by using division method. Roam around the class and check their work. Ask them to raise their hands when finished. Now call one pair of students to the front and ask them to present their work to the whole class. Ask the rest of the class to check their working and point out if there is any mistake and correct it. Repeat the same activity with other pairs of students. Appreciate them for their active participation.

Activity 2:

Give them worksheet and ask them to solve the worksheet by following instruction. Roam around the class, check their work and talk about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by retelling students about the method to find the LCM of two or more numbers by division method.

Assessment: (8 min)

Ask them to write three 2-digit numbers in their notebooks and find LCM of the numbers by division method. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q5 of Learning Check 2.2 at page 43.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

2. Find LCM of the following numbers by division method.

a) 20 and 30

b) 28 and 42

c) 7, 49, 56

d) 9, 12, 15

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 4**

Unit Name: LCM and HCF **Topic:** Summary and Review Exercise **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the unit LCM and HCF (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 43 and 44

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “LCM and HCF”.

Ask them the following questions to let them revise the basic concepts:

- What is meant by HCF?
- What are the clue words that are used for HCF?

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open page 44 of their textbooks. Ask them to solve Q1 and Q2 of “Unit Check 2” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 43.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 5**

Unit Name: LCM and HCF **Topic:** Summary and Review Exercise **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the unit LCM and HCF (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 43 and 44

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “LCM and HCF”.

Ask them the following questions to let them revise the basic concepts:

- What is meant by LCM?
- What are the clue words that are used for LCM?
- How can we find LCM by division method?

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open page 44 of their textbooks. Ask them to solve Q4, Q5 and Q6 of “Unit Check 2” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 43.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 6**

Unit Name: Fractions **Topic:** Addition of fractions **Date:**

Objective(s):

At the end of this period, the students will be able to:

Add two or three fractions with different denominators.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 46, 47 and 50

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask them: Do you know how we add fractions? Take their responses and tell them that with fractions having the same denominator, we add their numerator and the denominator remains the same. Tell them that today we are going to learn addition of fractions with different denominators.

Main Activities/Concept Building: (25 min)

Activity 1:

Have students open page 46 of their textbooks. Ask them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that we have to find the total time Zobia spends in reciting the Holy Quran. For this, we have to add the number of hours. Tell them that in the fractions $\frac{3}{4}$ and $\frac{5}{8}$ the denominators are different so first we convert the unlike fractions with different denominators to like fractions. For this, we find the LCM of the denominators of 4 and 8 that is 8. Now convert the unlike fractions to like fractions by converting them to equivalent fractions with the same denominators.

$$\frac{3}{4} = \frac{3 \times 2}{4 \times 2} = \frac{6}{8} \qquad \frac{5}{8} = \frac{5 \times 1}{8 \times 1} = \frac{5}{8}$$

Now add the like fractions with the same denominators. Add the numerators 6 and 5 that is 11 and the denominator 8 remains the same. Now we get $\frac{11}{8}$ that is an improper fraction. We convert the improper fraction to a mixed number that is $1\frac{3}{8}$. Explain each step of addition of unlike fractions to them by solving it on the board. Tell them that we can also show this addition with figures. Then draw figures and explain it to them.

Now ask them to solve the example again in their notebooks step by step. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by explaining to them the Notable Notes given on pages 46 and 48.

Assessment: (5 min)

To assess the students learning, ask them to write any two unlike fractions in their notebooks and solve it.

Homework: (2 min)

Solve Q1 (a-e) of Learning Check 3.1” at page 50 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 7**

Unit Name: Fractions

Topic: Addition of fractions

Date:

Objective(s):

At the end of this period, the students will be able to:

Add two or three fractions with different denominators.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 47, 48 and 50, Unlike fraction number cards

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask them: What are unlike fractions? How can we convert unlike fractions to like fractions? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 min)

Activity 1:

Make pairs of students. Give each pair unlike fractional number cards (proper, improper and mixed numbers). Instruct them to choose two or three cards at a time and then add that fractions by following steps in their notebooks. Instruct them to raise their hands when finished. Now call the pairs one by one to the front and ask them to present their work to the whole class. Ask the rest of the class to check their work and correct it if needed. Repeat this activity with all pairs of the class. Appreciate them for their good work.

Activity 2:

Have students open their textbooks to pages 47 and 48 and solve the given examples step by step in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up:

(3 min)

Sum up the lesson by explaining the steps of addition of unlike fractions.

Assessment:

(8 min)

Ask them to solve “Quick Check” given on page 48 of the textbook in their notebooks.

Homework:

(2 min)

Solve Q1 (f-i) of Learning Check 3.1” at page 50 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 1**

Unit Name: Fractions **Topic: Subtraction of fractions** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Subtract two fractions with different denominators.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 49, 50 and 51

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask them: Do you know how we subtract fractions? Take their responses and tell them that fractions with the same denominator, we subtract their numerator and the denominator remains the same. Tell them that today we are going to learn subtraction of fractions with different denominators.

Main Activities/Concept Building: (25 min)

Activity 1:

Have students open page 49 of their textbooks. Ask them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that we have to find how much more time Umar takes to complete painting than his sister. For this, we have to subtract the number of

hours. Tell them that in the fractions $\frac{5}{6}$ and $\frac{2}{3}$ the denominators are different so first we convert the unlike fractions with different denominators to like fraction. For this, we find the LCM of the denominator of 6 and 3 that is 6. Now convert the unlike fractions to like fractions by converting them to equivalent fractions with the same denominators.

$$\frac{5}{6} = \frac{5 \times 1}{6 \times 1} = \frac{5}{6} \qquad \frac{2}{3} = \frac{2 \times 2}{3 \times 2} = \frac{4}{6}$$

Now subtract the like fractions with the same denominators. Tell them that we subtract the smaller fraction from the greater fraction. Subtract the numerators 4 from 5 we get 1 and the denominator 6 remains the same. Now we get $\frac{1}{6}$ that is a proper fraction and in its simplest form. Explain each step of subtraction of unlike fractions to them by solving it on the board. Tell them that we can also show this subtraction with figures. Then draw figures and explain it to them.

Now ask them to solve the example again in their notebooks step by step. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by explaining them the Notable Notes given on page 49.

Assessment: (5 min)

To assess the students learning, ask them to solve “Quick Check” given on page 49 of the textbook in their notebooks.

Homework: (2 min)

Solve Q2 (a-e) of Learning Check 3.1” at page 51 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 2**

Unit Name: Fractions

Topic: Subtraction of fractions

Date:

Objective(s):

At the end of this period, the students will be able to:

Subtract two fractions with different denominators.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 50 and 51

Teaching & Learning Activities:

Opening Activities/Warm-up:

(3 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask them: How can we convert unlike fractions to like fractions? How can we subtract unlike fractions?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building:

(22 min)

Activity 1:

Make pairs of students. Give each pair unlike fractional number cards (proper, improper and mixed numbers). Instruct them to choose two cards at a time and then subtract that fractions by following steps in their notebooks. Instruct them to raise their hands when finished. Now call each pair one by one to the front and ask them to present their work to the whole class. Ask the rest of the class to check their work and correct it if needed. Repeat this activity with all pairs of the class. Appreciate them for their good work. Have students open their textbooks to page 50 and solve the given example in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up:

(3 min)

Sum up the lesson by explaining the steps of subtraction of unlike fractions.

Assessment:

(8 min)

Ask them to solve “Quick Check” given on page 51 of the textbook in their notebooks.

Homework:

(2 min)

Solve Q1 (f-i) of Learning Check 3.1” at page 51 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 3**

Unit Name: Fractions **Topic: Multiplication of fractions** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Multiply a fraction by a 1-digit number and demonstrate with the help of a diagram.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 51 and 54

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them to write any two fractions and then subtract the smaller fraction from the greater one. Take their responses and appreciate them for their good work.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students we are going to learn about multiplication of fractions by a 1-digit number. Have students open their textbook to page 51. Ask them to read the statement of the example given and tell what is given and what we have to find. Take their responses and tell them that we have to find the total mass of dates that are distributed among fasting persons. Tell students about the importance of fasting. Tell them that 8 boxes of dates are given and the mass of dates in each box is given. We have to multiply $\frac{3}{5}$ by 8. Then solve it on the board step by step and explain each step to them. Also draw a diagram to show the multiplication of a fraction by a whole number.

Sum Up: (3 min)

Sum up the lesson by retelling students about the multiplication of a fraction by a whole number is the same as repeated addition of the fraction for the whole number of times (Notable Note).

Assessment: (8 min)

To assess the students learning, ask them to solve Q1 (a-b) of Learning Check 3.2 at page 54 of the textbook in their notebooks.

Homework: (2 min)

Solve Q1 (c-d) of Learning Check 3.2 at page 54 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 4**

Unit Name: Fractions **Topic: Multiplication of fractions** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Multiply a fraction by a 1-digit number and demonstrate with the help of a diagram.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 52, 54 and 55

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them: Do you know how we can multiply fractions by whole numbers. Take their responses and appreciate them for their good work.

Main Activities/Concept Building: (22 min)

Activity 1:

Put two baskets on the table. Put fraction number cards in one basket and 1-digit number cards in the other basket. Call a student to the front of the class and ask him/her to choose one card from each basket. Instruct them to write the numbers given on the card on the board and then multiply the numbers. Ask the rest of the class to check their work and correct it if needed. Ask them to show the multiplication of fractions and whole numbers with the help of a diagram. Repeat the same activity with the other students. Appreciate them for their active participation.

Have students open their textbooks to page 52 and solve the given example in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 min)

Sum up the lesson by retelling students about how to multiply fractions by 1-digit numbers.

Assessment: (8 min)

To assess the students, ask them to Solve “Quick Check” on page 52 of their textbooks.

Homework: (2 min)

Solve Q1 (e-h), Q3 and Q4 of Learning Check 3.2 on page 54 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 5**

Unit Name: Fractions **Topic: Multiplication of fractions)** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply two or three fractions involving proper, improper fractions, and mixed numbers.

Solve real life situations involving multiplication of fractions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 53 and 55

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their previous day work.

Call a student to the front of the class and ask him/her to write any fraction and a 1-digit number and then multiply with the help of diagram. Take their response and appreciate for their good work.

Main Activities/Concept Building: (22 mins)

Activity 1:

Tell students today we are going to learn about multiplication of fraction by a fraction. Have students to open their textbook to page 53. Ask them to read the statement of the example given and tell what is given and what we have to find. Take their response and tell them that we have to find the total distance he coved in $4\frac{2}{5}$ hours. If he covered $2\frac{1}{2}$ km in one hour. Tell them to find the total distance we have to multiply $2\frac{1}{2}$ km and $4\frac{2}{5}$. Tell them to multiple these fractions first we convert the mixed numbers into improper fraction then multiply numerator by numerator and denominator by denominator. Solve the example step by step on the board and explain each step to students.

Ask them to solve the example 1 again in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (6 mins)

Sum up the lesson by re-telling students to multiply fractions with fraction multiply numerator by numerator and denominator by denominator.

Assessment: (5 mins)

To assess the students learning, ask them to solve “Quick Check” given on page 53 of their textbook in their notebooks.

Homework: (2 mins)

Solve Q2 (a-d) of “Learning Check 3.2” at page 55 of the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 6**

Unit Name: Fractions **Topic: Multiplication of fractions)** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply two or three fractions involving proper, improper fractions, and mixed numbers.

Solve real life situations involving multiplication of fractions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 53-55

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their previous day work. Ask them to tell how we multiply fraction by a fraction. Take their responses and tell them that we have to multiply numerator and denominator by denominator.

Main Activities/Concept Building: (25 mins)

Activity:

Have students to open their textbook page 53. Write the example given on textbook on the board. Tell them we have to multiply $\frac{1}{4}$ and $\frac{2}{3}$. Call a student to the front of the class and ask him/her to multiply these fractions step by step on the board. Ask the rest of the class to check their work and correct if needed. Take their response and appreciate them for their good work. Now draw figures to show these multiplications of fractions. Explain to them how we can show multiplication with the help of diagrams.

Repeat this activity to write different fractions on the board and ask them to multiply these fractions in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 mins)

Sum up the lesson by explaining students how we show the multiplication of fraction with the help of diagram.

Assessment: (5 mins)

To assess the students ask them to solve "Quick check" on page 54 of their textbook in their notebooks.

Homework: (2 mins)

Solve Q2 (e-h) and Q5 of "Learning Check 3.2" of the textbook page 55.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 7**

Unit Name: Fractions **Topic: Multiplication of fractions)** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Multiply two or three fractions involving proper, improper fractions, and mixed numbers.

Solve real life situations involving multiplication of fractions.

Resource Material:

Chalk/Marker, White/Blackboard, textbook page 53-55

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their previous day work. Ask them: how we multiply mixed numbers? Take their responses and tell them that when we multiply mixed numbers first we convert them into improper fraction then we multiply numerator by numerator and denominator by denominator.

Main Activities/Concept Building: (25 mins)

Activity:

Make pairs of students according to the strength of the class. Give each pair some fraction number cards.

Ask them to choose two fractions at a time and multiply them in their notebook and also show the multiplication of fraction with the help of diagram. Roam around the class, check their work and guide if required. Instruct them to raise their hand when finished. Now call one by one each pair to the front of the class and ask them to show their work to the whole class. Check their work and correct if needed.

Appreciate them for their good work.

Have them open their textbook page 54 and ask them to solve the examples of multiplication of fractions in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 mins)

Sum up the lesson by explaining students the steps of multiplication of two fractions.

Assessment: (5 mins)

To assess the students learning, ask them to solve “Quick Check” at page 54 of their textbook in their notebooks.

Homework: (2 mins)

Solve Q2 (i-l), Q6 and Q7 of “Learning Check 3.2” of their textbook page 55.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 1**

Unit Name: Fractions **Topic: Division of fractions** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Divide a fraction by another fraction involving proper, improper fraction, and mixed numbers.

Solve real life situations involving division of fractions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 56-59

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their previous day work. Call a student to the front of the class and ask him/her to write any two fractions on the board and multiply. Ask the rest of the class to check and correct if required.

Main Activities/Concept Building: (25 mins)

Activity 1:

Tell them that today we are going to learn about division of fraction by another fraction. Ask them: Do you know how we can divide a fraction by another fraction. Take their responses and appreciate if some gives the right answer.

Have students to open their textbook page 56. Ask them to read the statement of the example 1 and tell what is given and what we have to find. Take their responses and tell them that we have to find the mass of each crate of tomatoes. Tell them to find each crate mass we have to divide $15\frac{1}{3}$ kg by $3\frac{1}{2}$. Tell them first we convert the mixed numbers to improper fractions then we convert the fraction $\frac{7}{2}$ by its reciprocal $\frac{2}{7}$ and replace the symbol of multiplication by division symbol. Now we multiply the given fraction.

Ask them to solve the example 1 again in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up: (3 mins)

Sum up the lesson by explaining the notable note given on textbook page 56.

Assessment: (5 mins)

To assess the students learning, write some fractions on the board and ask them to convert them to their reciprocals. Ask them to solve “Quick check” at page number 56 of their textbook in their notebooks.

Homework: (2 mins)

Solve Q1 of “Learning check 3.3” of their textbook page 58 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 2**

Unit Name: Fractions **Topic: Division of fractions** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Divide a fraction by another fraction involving proper, improper fraction, and mixed numbers.

Solve real life situations involving division of fractions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 57-59

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their previous day work. Ask students: What is meant by reciprocal of fraction? Take their responses and tell them that when we interchange numerator by its denominator then that fraction is called the reciprocal of the given fraction.

Main Activities/Concept Building: (25 mins)

Activity 1:

Have students to open their textbook to page 57 of their textbook. Ask them to read the statement of the example 2 and tell what is given and what we have to find. Take their responses and tell them that the length of wire that is used in one room is given and the total length of the wire is given and we have to find the number of rooms in which this total wire is used. For this we divide $9\frac{3}{5}$ by $\frac{4}{5}$. Now divide these fractions on the board step by step and explain each step to them.

Ask them to solve the example 3 in their notebooks. Roam around the class, check their work and guide them if required.

Activity 1:

Ask students to make their own word problem of division of fractions. Roam around the class and check their work. Instruct them to share their problems with each other. Ask them to come one by one to the front of the class and present their work. Ask the rest of the class to check and tell if any mistake.

Appreciate them for their active participation.

Sum Up: (3 mins)

Sum up the lesson by explaining the notable notes given on page 57 of their textbook.

Assessment: (5 mins)

Ask them to solve “Quick check” at page number 57 of their textbook in their notebooks. Ask them to solve Q4 of “Learning Check 3.3” at page 59 of their textbook in their notebooks.

Homework: (2 mins)

Solve Q2 and Q3 of “Learning check 3.3” of their textbook page 58 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 3**

Unit Name: Fractions **Topic: Division of fractions** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Divide a fraction by another fraction involving proper, improper fraction, and mixed numbers.

Solve real life situations involving division of fractions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 58-59

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask them to tell how we divide the fractions take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Make pairs of students according to the strength of the class. Give each pair some fraction number cards.

Ask them to choose two fractions at a time and divide by fraction by another in their notebook Roam

around the class, check their work and guide if required. Instruct them to raise their hand when finished.

Now call one by one each pair to the front of the class and ask them to show their work to the whole class.

Check their work and correct if needed. Appreciate them for their good work.

Sum Up:

(3 mins)

Sum up the lesson by re-telling students how to divide a fraction by another fraction by solving example of division of fractions on the board.

Assessment:

(5 mins)

Ask them to solve “Quick check” at page number 58 of their textbook in their notebooks. Ask them to solve

Q5 of “Learning Check 3.3” at page 59 of their textbook in their notebooks.

Homework:

(2 mins)

Solve Q6 and Q7 of “Learning check 3.3” of their textbook page 59 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 4**

Unit Name: Fractions **Topic:** Revision (Unit check and Summary) **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 59 and 60

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Fractions”.

Ask them the following questions to let them revise the basic concepts:

- How can we add two fractions with different denominators?
- How can we subtract two fractions with different denominators?

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open page 60 of their textbooks. Ask them to solve Q1 of “Unit Check 3” in their textbooks. Ask them to solve Q2 (a-f) in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 59.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q2 (g-l) of “Unit Check 3” at page 60 given in the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 5**

Unit Name: Fractions **Topic:** Revision (Unit check and Summary) **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit fraction (Summary and Review Exercise).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 59 and 61

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “fractions”.

Ask them the following questions to let them revise the basic concepts:

- How can we add two fractions with different denominators?
- How can we subtract two fractions with different denominators?

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open page 61 of their textbooks. Ask them to solve Q3, Q4 and Q5 of “Unit Check 3” of the textbooks in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 59.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q6 and Q7 of “Unit Check 3” at page 61 given in the textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 6**

Unit Name: Decimal Numbers

Topic: Comparing decimals

Date:

Objective(s):

At the end of this period, the students will be able to:

Compare numbers up to 3 digits with 2 decimal places using the signs $<$, $>$ or $=$.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 63, 64 and 66

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Tell them that today we are going to compare decimal numbers. Ask them: Do you know how we can compare decimal numbers? Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building:

(25 min)

Activity 1:

Have students open their textbooks to page 63. Ask them to read the statement of the example given and tell what is given and what we have to find. Take their responses and tell them that the quantity of mangoes and apples in the fruit salad is given and we have to find which fruit is more in quantity. For this we, have to compare 1.25 kg and 1.50 kg. Tell them that we can compare decimal numbers by placing numbers in a place value table. Draw a place value table on the board and write the decimal numbers in the table. Tell them that we start comparing numbers from left. Look at the number at the ones place they are the same. Now we compare the numbers at the tenths place, the digit 2 is smaller than 5 or 5 is greater than 2 so 1.50 is greater than 1.25. Thus the quantity of apples in the fruit salad is more than mangoes.

Ask them to write two decimal numbers in their notebooks and then compare them by placing them in a place value table. Roam around the class, check their work and guide them if required.

Sum Up:

(3 min)

Sum up the lesson by explaining to students that to compare two decimal numbers, start comparing the digits from the left (Notable Note).

Assessment:

(5 min)

To assess the students learning, ask them to solve "Quick Check" on page 64 of the textbook in their notebooks.

Homework:

(2 min)

Solve Q1 (a-c) of "Learning Check 4.1" at page 66 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 7**

Unit Name: Decimal Numbers

Topic: Comparing decimals

Date:

Objective(s):

At the end of this period, the students will be able to:

Compare numbers up to 3 digits with 2 decimal places using the signs $<$, $>$ or $=$.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 63, 64 and 66

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework.

Ask them: How can we compare decimal numbers?

When we compare decimal numbers, from where we start to compare?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building:

(25 min)

Activity 1:

Call a student to the front of the class. Ask him/her to write two decimal numbers (3 digits up to 2 decimal place) on the board. Then show the decimal numbers in a place value table. Instruct him/her to compare the numbers and tell which is greater. Ask the rest of the class to check their work and correct if needed. Appreciate him/her for their good effort. Now repeat the same activity to every student of the class. Have students to open their textbooks to page 63. Ask them to solve the example given in the textbook in their notebooks. Roam around the class, check their work and guide them if required. Appreciate them for their good work.

Sum Up:

(3 min)

Sum up the lesson by explaining to students that we can compare numbers by showing the decimal numbers in a place value table.

Assessment:

(5 min)

To check their understanding, ask them to write two decimal numbers in their notebooks and then compare and tell which is greater and which is smaller.

Homework:

(2 min)

Solve Q1 (d-i) of "Learning Check 4.1" at page 66 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 1**

Unit Name: HCH and LCM **Topic:** Revision (HCF) **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of HCF of the unit LCM and HCF.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students:

What is meant by HCF?

How can we find the HCF of two or more numbers by prime factorization method?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find the HCF of the following numbers by prime factorization method.

a) 36 and 42

b) 20, 45 and 60

2. Find the HCF of 56 and 28 by factor tree method.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 2**

Unit Name: HCF and LCM **Topic:** Revision (LCM) **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of LCM of the unit “LCM and HCF”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to LCM.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find the LCM of 18, 24 and 36 by factor tree method.

2. Find the LCM of 30, 50 and 60 by prime factorization method.

3. Find the LCM of 22, 66 and 88 by division method.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1

Periodic Unit: 2

Week: 5

Lesson Plan: 3

Unit Name: Fractions

Topic: Revision (Addition of fractions)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of addition of fractions of the unit “Fractions”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to the addition of fractions.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 min)

N/A

Homework:

(0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Add the following.

- a) Tahir read the storybook on Monday for $\frac{3}{4}$ hours and on Tuesday for $\frac{6}{9}$ hours. Find the total time he spent reading the storybook.

2. Find the sum of $\frac{2}{5}$, $\frac{7}{15}$ and $\frac{1}{3}$.

3. Find the sum of $2\frac{3}{7}$ and $7\frac{1}{14}$.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 4**

Unit Name: Fractions **Topic:** Revision (Subtraction of Fractions) **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of subtraction of fractions of the unit “Fractions”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to the subtraction of fractions.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Subtract the following.

a) $\frac{1}{2} - \frac{1}{5}$

b) $\frac{9}{8} - \frac{1}{3}$

c) $1\frac{9}{10} - \frac{5}{7}$

d) $7\frac{1}{8} - 3\frac{1}{2}$

2. Asad does his Maths homework in $2\frac{5}{7}$ hours and his English homework in $1\frac{5}{7}$ hours. How much more time does he spend doing his Maths homework than his English homework?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 5**

Unit Name: Fractions **Topic:** Revision (Multiplication of Fractions) **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of multiplication of fractions of the unit “Fractions”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to the multiplication of fractions.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Multiply the following with the help of a diagram.

a) $\frac{2}{3} \times 5$

2. Find the product of the following.

a) $\frac{4}{5} \times \frac{7}{9}$

b) $\frac{6}{11} \times 2\frac{1}{4}$

3. In a grade 5 class, $\frac{2}{5}$ of the students are boys. If there are 40 students in the class, then how many girls and boys are there?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1

Periodic Unit: 2

Week: 5

Lesson Plan: 6

Unit Name: Fractions

Topic: Revision (Division of fractions)

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of division of fractions of the unit “Fraction”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to the division of fractions.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 min)

N/A

Homework:

(0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

d) Divide the following.

a. $4 \frac{2}{3} \div \frac{7}{9}$

b) $\frac{6}{7} \div \frac{3}{7}$

c) $\frac{1}{5} \div \frac{2}{10}$

d) $1 \frac{1}{6} \div \frac{1}{18}$

e) A carpenter cuts a $1 \frac{1}{4}$ m long piece of wood into $\frac{3}{8}$ m long pieces. How many pieces of wood will he get?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Term: 1 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 7**

Unit Name: Decimal Numbers **Topic:** Revision (Comparing decimals) **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of comparing decimal numbers of the unit “Decimal Numbers”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to the comparing of decimals.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Show the given decimal numbers in a place value table and then compare and tell which one is smaller.

2.32 and 7.88

--	--	--	--	--	--	--	--	--	--

2. Compare and write $<$, $>$ or $=$ in the given boxes.

3.14 1.19

4.45 2.11

9.34 9.19

8.23 8.73

2.17 2.12

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 1**

Unit Name: Decimals and Percentage **Topic: Arranging Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Arrange numbers up to 3-digit numbers with 2 decimal places in ascending and descending order.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 64 and 65

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask the students: How are you? Encourage them to say, “Alhamdulillah”.

Start with ‘Bismillah’ and tell them to recite it before starting any work.

Ask students: Do you know how we can compare two decimal numbers? Write two decimal numbers for example 1.34 and 4.12 on the board and ask them to compare and tell which one is greater and which one is smaller? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students to open their textbook page 64. Ask the students to read the statement of the example and tell what is given take their responses and tell them that quantity of almonds, walnuts and peanuts that Ahmad bought is given and we have to compare the masses of these fried fruits and then write them in ascending and descending order.

Draw a place value table and then show the numbers 2.75, 1.50 and 3.77 in the place value table.

Ones	Decimal Point	Tenths	Hundredths
2	.	7	5
1	.	5	0
3	.	7	7

Now tell them that first we compare the digits at ones place as, 3 is greater than 1 and 2 so 3.77 is the greatest decimal number. 1 is smaller than 2 and 3 so, 1.50 is the smallest decimal number. Now we arrange the decimal numbers in ascending order. Ask students: Do you know what is meant by ascending order? Take their responses that must be the arrangement of numbers from smallest to greatest.

As $1.50 < 2.75 < 3.77$

So 1.50, 2.75, 3.77 is the arrangement of decimal numbers in ascending order.

As $3.77 > 2.75 > 1.50$

So, 3.77, 2.75, 1.50 is the arrangement of decimal numbers in descending order.

Repeat this by writing different decimal numbers on the board and then ask them to arrange the numbers in ascending and descending order.

Sum Up:

(3 mins)

Sum up the lesson by re-telling students how we can arrange the decimal numbers in ascending and descending order by placing numbers in place value table.

Assessment:

(5 mins)

To assess the learning of the students ask them to solve “Quick Check part a” given at page 66 of their textbook in their notebook.

Homework:

(2 mins)

Solve Q2 of “Learning Check 4.1” at page 67 of their textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 2**

Unit Name: Decimals and Percentage **Topic: Arranging Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Arrange numbers up to 3-digit numbers with 2 decimal places in ascending and descending order.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 65, 66 and 67

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework.

Ask them to tell: what is meant by ascending order of decimals? What is meant by descending order of decimal numbers? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 mins)

Activity 1:

Instruct students to work in pairs. Ask them to write any four to five decimal numbers up to 2-decimal places in their notebook and then arrange that numbers in ascending and descending order. Roam around the class and check their working. Instruct them to raise hand when finished. Now call one pair of student to the front of the class and instruct them to write their decimal numbers in ascending and descending order on the board and ask the rest of the class to check and correct if needed. Repeat this activity to other pair of the class. Appreciate them for their correct answer and discuss with them about their common mistakes.

Activity 2:

Have students to open their textbook page 65 and observe the example 2. Instruct them to arrange the that decimal numbers in ascending and descending order by drawing place value table in their notebook. Roam around the class, check their work and guide them if required.

Sum Up: (3 mins)

Sum up the lesson by re-telling the students about arrangement of ascending and descending order as given in notable note.

Assessment: (5 mins)

To assess the students ask them to solve the “Quick check part b” given on page 66 of their textbook in their notebooks. Roam around the class, check their work and correct them if needed.

Homework: (2 mins)

Solve Q3 of “Learning Check 4.1” at page 67 of their textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 3**

Unit Name: Decimals and Percentage

Topic: Addition of Decimals

Date:

Objective(s):

At the end of this period, the students will be able to:

Add 4-digit numbers up to 3-decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 67, 68 and 69, flash cards of decimal numbers

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their previous day homework.

Write three decimal numbers on the board and ask them to arrange these decimal number to ascending and descending order. Take their responses and appreciate them for their good work.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students to open their textbook page 67. Ask students to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that quantity of mango juice and apple juice that Asif bought is given and we have to find the quantity of both juices that he buy. Tell them that to add the decimal numbers we follow some steps. To add decimal number first write the numbers vertically and align the decimal point and then add the decimal numbers as we add the whole numbers just place the decimal point below the decimal point.

Ones	Decimal Point	Tenths	Hundredths
2	.	3	9
+ 5	.	1	2
7	.	5	1

Now arrange the decimal numbers 2.39 and 5.12 vertically in a place value table and add step by step and explain each step to them.

Ask students to solve the example 2 in their notebook. Roam around the class, check their work and appreciate them for their good work.

Activity 2:

Make 3-digit decimal number up to two decimal places cards in a basket. Call a student to the front of the class and ask him/her to choose two cards of your own choice and then write that decimal numbers vertically on the board and add them. Take his/her response and ask the rest of the class to check their work and guide them where needed. Repeat this activity to each student of the class. Appreciate them for their correct answer.

Sum Up:

(3 mins)

Sum up the lesson by explaining the notable notes given at page 67 of their textbook.

Assessment:

(5 mins)

To assess the learning of the students ask them to solve "Quick Check" on page 68 of their textbook in their notebooks.

Homework:

(2 mins)

Solve Q1 of "Learning Check 4.2" of their textbook page 69 in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 4**

Unit Name: Decimals and Percentage **Topic: Subtraction of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Subtract 4-digit numbers up to 3-decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 68 and 69, decimal number cards

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their previous day homework.

Ask students to tell: how we can add two decimal numbers? Tell the steps to add two decimal numbers?

Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 mins)

Activity 1:

Have students to open their textbook page 68. Tell students today we will learn about subtraction of decimal numbers. Tell students to subtract decimal numbers first write the numbers vertically and align the decimal point then subtract the decimal number as we subtract the whole numbers just place the decimal point below the decimal point.

Tell them that always subtract the smaller decimal number from the greater one. Now arrange the decimal numbers 7.44 and 5.39 vertically in a

place value table and subtract step by step and explain each step to them.

Ask students to solve the example 2 in their notebook. Roam around the class, check their work and appreciate them for their good work.

Ones	Decimal Point	Tenths	Hundredths
7	.	4	4
– 5	.	3	9
2	.	0	5

Activity 2:

Make 3-digit decimal number up to two decimal places cards in a basket. Call a student to the front of the class and ask him/her to choose two cards of your own choice and then write that decimal numbers vertically on the board and subtract them. Take his/her response and ask the rest of the class to check their work and guide them where needed. Repeat this activity to each student of the class. Appreciate them for their correct answer.

Sum Up: (3 mins)

Sum up the lesson by explaining the notable notes given at page 68 of their textbook.

Assessment: (5 mins)

To assess the learning of the students ask them to solve “Quick Checks” on page 68 and 69 of their textbook in their notebooks.

Homework: (2 mins)

Solve Q2 and Q3 of “Learning Check 4.2” of their textbook page 69 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 5**

Unit Name: Decimals and Percentage **Topic: Multiplication of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by 10, 100, and 1000.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 69, 70 and 74

Teaching & Learning Activities:

Opening Activities/Warm-up: (8 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them how we add and subtract decimal numbers? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (22 mins)

Activity 1:

Have students to open their textbook page 69 and read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that length of a piece of ribbon is given and we have to find the length of such 10, 100 and 1000 pieces. For this we have to multiply 4.57 by 10, 100 and 1000. Tell them that when we multiply 4.57 by 10, the decimal point moves one decimal place towards the left.

$$4.57 \times 10 = 45.7$$

When we multiply 4.57 by 100 the decimal point moves two decimal point to the right and when we multiply 4.57 by 1000 then the decimal point moves three decimal point towards the right.

$$4.57 \times 100 = 457$$

$$4.57 \times 1000 = 4570$$

Tell them that length of 10 pieces of ribbon is 45.7 m and length of 100 pieces of ribbon is 457 m and the length of 1000 pieces of ribbons are 4570 m.

Ask students to solve example 2, 3 and 4 given at textbook page 70 in their notebook. Walk around the class, check their work and guide them if required.

Activity 1:

Sum Up: (3 mins)

Sum up the lesson by re-telling students how we can multiply decimal numbers by 10, 100 and 1000 by solving different examples on the board.

Assessment: (5 mins)

Ask them to solve the “Quick check” given at page 70 of their textbook in their notebook.

Homework: (2 mins)

Solve Q1(a-e) of “Learning Check 4.3” given at textbook page 74 in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 6**

Unit Name: Decimals and Percentage **Topic: Multiplication of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by 10, 100, and 1000.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 74, flash cards of decimal numbers, worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework.

Ask students: how many decimal point moves to the right when we multiply a decimal number by 1000.

Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 mins)

Activity 1:

Make three groups of students. Give each group five flash cards of decimal numbers. Instruct first group to multiply decimal number by 10. Instruct the second group to multiply the decimal number by 100 and the third group multiply the decimal numbers by 1000. Roam around the class and observe their working.

Instruct them to raise hand when finished. Now call first group and ask them to show their working. To the whole class. Ask the rest of two groups to check their working and correct if needed. Repeat this activity to the other groups. Appreciate them for their good working.

Activity 2:

Give them worksheet. Instruct them to follow instructions and complete the given worksheet. Roam around the class, check their working and guide them if required.

Sum Up: (3 mins)

Sum up the lesson by explaining students the notable notes given at page 70 of their textbook.

Assessment: (5 mins)

To assess the learning of the students ask them to how many times the decimal point moves to the right when we multiply it by 10, 100 and 1000.

Homework: (2 mins)

Solve Q1(f-i) of "Learning Check 4.3" at page 74 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Multiply the following.

$$1.99 \times 10$$

$$23.5 \times 10$$

$$6.76 \times 100$$

$$0.98 \times 100$$

$$1.44 \times 1000$$

$$0.09 \times 1000$$

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 7**
Unit Name: Decimals and Percentage **Topic: Multiplication of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by a whole number up to 2-digit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 38-42

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework.

Ask students to tell: How we multiply a number by 10, 100 and 1000? How many point the decimal point moves towards the right when we multiply a decimal number by 10, 100 and 1000. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(30 mins)

Activity:

Have students to open their textbook page 70. Tell them that today we are going to learn about the multiplication of decimal number by whole numbers up to 2-digits. Tell them there are two methods to multiply the decimal number by whole number first is by converting them to fraction and second one is direct method. Tell them that today we will multiply decimal number by whole number by converting decimal number to fraction. Ask them to read the statement of the example given at textbook page 70. Ask them to read the statement and tell what is given and what we have to find. Take their responses and tell them that a tailor uses 3.8 metres of fabric to stitch a scarf. We have to find the fabric he will need to stitch such 12 scarves. For their we have to multiply 3.8 by 12. To multiply first convert 3.8 into fraction and then multiply it by 12.

$$3.8 = \frac{38}{10}$$

$$3.8 \times 12 = \frac{38}{10} \times 12 = \frac{38 \times 12}{10} = \frac{456}{10} = 45.6$$

Now ask students to solve the example given at textbook page 71 of their textbook in their notebook. Roam around the class, check their work and guide them if required.

Sum Up:

(3 mins)

Sum up the lesson by re-telling the students how we multiply a decimal number by solving example on the board.

Assessment:

(5 mins)

To assess the students ask them to solve the "Quick Check" given at page 71 of their textbook.

Homework:

(2 mins)

Solve Q2(a-d) of "Learning Check 4.3" at page 75 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 1**

Unit Name: Decimals and Percentage **Topic: Multiplication of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by a whole number up to 2-digit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 71, 72 and 75

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their previous day homework.

Ask student: how we can multiply a decimal number by a whole number by converting them into fraction.

Take their responses and appreciate them for their correct answer. Call a student to the front of the class

and ask him/her to write a decimal number and a 2-digit whole number and then multiply them by

converting them into fraction. Ask the rest of the class to check and correct if needed.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students to open their textbook page 71. Tell them that today we will multiply a decimal number by a

2-digit whole number by direct method. Tell them that when we

multiply a decimal number by a whole number first ignore the decimal

point and multiply them as we multiply whole numbers.

Let us multiply 7.12 and 11.

After this count the number of digits in the multiplicand after the

decimal point. There are two digits after the decimal point. Now

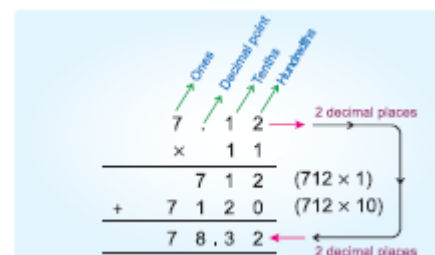
count the same number of digits from the ones place of the product

that 7832 and put the decimal point exactly where it is in the multiplicand. So the answer is 78.32

Ask students to write one decimal number and a whole number in their notebook and multiply it by using

direct method. Roam around the class, check their work and guide them if required. Appreciate them for

their good work.



Sum Up:

(3 mins)

Sum up the lesson by explaining the steps of multiplication of decimal numbers and whole number by direct method.

Assessment:

(5 mins)

To assess the learning of the students ask them to solve Q2(e, f) of "Learning check 4.3" at page 75 of their textbook in their notebook.

Homework:

(2 mins)

Solve Q2(g-i) of "Learning check 4.3" at page 75 of their textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 2**

Unit Name: Decimals and Percentage **Topic: Multiplication of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by a 3-digit number up to 2 decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 72- 75

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their previous day homework.

Ask students to tell: How many methods to multiply a decimal number by a whole number. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 mins)

Activity 1:

Have students to open their textbook page 72. Tell them that today we are going to learn about the multiplication of decimal number by decimal numbers. Tell them there are two methods to multiply the decimal numbers, first is by converting them to fraction and second one is direct method. Tell them that today we will multiply decimal numbers by converting decimal number to fraction. Ask them to read the statement of the example given at textbook page 72. We have to multiply 1.23 by 2.3. for this we convert both decimal numbers to fractions that is:

$$1.23 = \frac{1.23}{100}, 2.3 = \frac{23}{10}$$

Now we multiply them as:

$$\begin{aligned} 1.23 \times 2.3 &= \frac{1.23}{100} \times \frac{23}{10} \\ &= \frac{123 \times 23}{100 \times 10} \\ &= \frac{2829}{1000} = 2.829 \end{aligned}$$

Explain each step to students by solving another example of multiplication of two decimal numbers.

Sum Up: (3 mins)

Sum up the lesson by explaining the steps of multiplication of decimal number by decimal number by converting them to fraction.

Assessment: (5 mins)

To assess the students learning ask them write two decimal numbers in their notebook and then multiply them.

Homework: (2 mins)

Solve Q3(a-c) of Learning Check 4.3 at page 75 of their textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 3**

Unit Name: Decimals and Percentage **Topic: Multiplication of Decimals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by a 3-digit number up to 2 decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 73-75

Teaching & Learning Activities:

Opening Activities/Warm-up:

(8 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: how many methods to multiply decimal numbers? Take their responses and tell them that there are two methods first one is by converting decimal to fraction and the other one is direct method. Write two decimal numbers on the board and ask them to multiply these decimal numbers by converting them to fractions. Move around and check their work and guide if required.

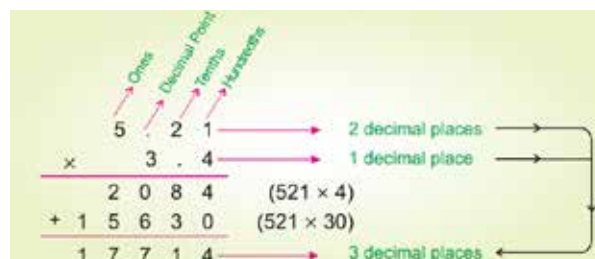
Main Activities/Concept Building:

(22 mins)

Have students to open their textbook page 73. Tell them that today we will multiply a decimal number by a 2-digit decimal number up to 1-decimal number by direct method. Tell them that when we multiply a decimal number by a decimal number first ignore the decimal point and multiply them as we multiply them.

Let us multiply 5.21 and 3.4.

After this count the number of digits in the multiplicand and multiplier after the decimal point. There are two digits after the decimal point in 5.21 and one digit in the multiplier. Now count the same number of digits from the ones place of the product that 17714 and put the decimal point exactly where it is in the multiplicand and multiplier. So the answer is 17.714



Ask students to write two decimal number in their notebook and multiply it by using direct method. Roam around the class, check their work and guide them if required. Appreciate them for their good work.

Sum Up:

(3 mins)

Sum up the lesson by re-telling students how we multiply a 3-digit decimal number up to 2-decimal places and a 2-digit decimal number up to 1-decimal place.

Assessment:

(5 mins)

To assess the understanding of the students ask them to solve "Quick check" given at page 73 of their textbook in their notebook.

Homework:

(2 mins)

Solve Q3(d-f) of Learning Check 4.3 at page 75 of their textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2

Periodic Unit: 1

Week: 2

Lesson Plan: 4

Unit Name: Decimals and Percentage

Topic: Multiplication of Decimals

Date:

Objective(s):

At the end of this period, the students will be able to:

Multiply a 3-digit number up to 2 decimal places by a 3-digit number up to 2 decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 73-75

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework.

Ask students: how we can multiply two decimal numbers by direct and by converting them into fractions.

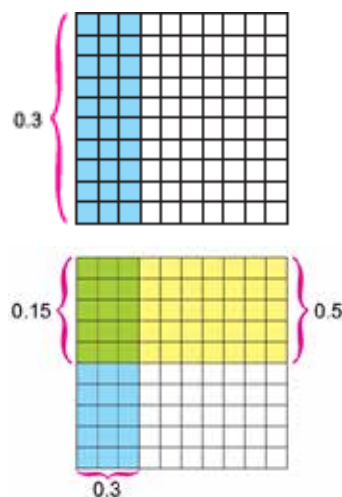
Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 mins)

Activity 1:

Have students open page 73 of their textbooks. Tell them that there is another method to multiply two decimal numbers that is called grid method. Write two decimal numbers 0.3 and 0.5 on the board and tell them that to multiply 0.3 and 0.5 by using grid method we follow some steps. First draw a square grid with 100 small squares. As 0.3 means $\frac{3}{10}$ in fraction form. So colour three columns in blue colour.



Now convert 0.5 to fractions as $\frac{5}{10}$ so colour five rows in yellow.

Now ask students to observe the grid and look at the portion overlapped by both colours that represent product of 0.3 and 0.5 15 out of 100 smaller square are overlapped by both colours. This product is shown by green colour. So. 0.3 multiplied by 0.5 is equal to 0.15.

Sum Up:

(3 mins)

Sum up the lesson by explaining students to multiply decimal numbers by box method.

Assessment:

(8 mins)

To assess the students learning ask them to solve the "Quick check" given at page 74 of their textbook in their notebook. Roam around the class, check their work and guide them where needed.

Homework:

(2 mins)

Solve Q3(g-i) and Q4 of Learning Check 4.3 at page 75 of their textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 5**

Unit Name: Decimals and Percentages **Topic:** Division of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a 3 - digit number up to 2 decimal places by 10, 100, and 1000.

Solve real life situations involving division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 69, 70 and 74

Teaching & Learning Activities:

Opening Activities/Warm-up:

(8 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them how we add and subtract decimal numbers? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 mins)

Activity 1:

Have students to open their textbook page 75 and read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that a plumber wants to cut a piece of the pipe of length 7.26 m into 10 equal pieces and we have to find the length of each piece of the wire. For this we have to divide 7.26 by 10. Tell them that when we divide 7.26 by 10, the decimal point moves one decimal place towards the left.

$$7.26 \div 10 = 0.726 \text{ m}$$

Tell them that length of one piece of the pipe is 0.726 m.

Ask students to solve example 2, 3 and 4 given at textbook page 75 in their notebook. Walk around the class, check their work and guide them if required.

Activity 1:

Sum Up:

(3 mins)

Sum up the lesson by re-telling students how we can divide decimal numbers by 10, 100 and 1000 by solving different examples on the board. And explain the notable note given at page 75 of their textbook.

Assessment:

(5 mins)

To assess the students understanding ask them to write three decimal number and divide them by 10, 100 and 1000.

Homework:

(2 mins)

Solve Q1(a-d) of “Learning Check 4.4” given at textbook page 79 in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 6**

Unit Name: Decimals and Percentages **Topic:** Division of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a 3 - digit number up to 2 decimal places by 10, 100, and 1000.

Solve real life situations involving division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 79, flash cards of decimal numbers, worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework.

Ask students: How many decimal point moves to the left when we divide a decimal number by 100. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 mins)

Activity 1:

Make three groups of students. Give each group five flash cards of decimal numbers. Instruct first group to divide decimal number by 10. Instruct the second group to divide the decimal number by 100 and the third group divide the decimal numbers by 1000. Roam around the class and observe their working. Instruct them to raise hand when finished. Now call first group and ask them to show their working. To the whole class. Ask the rest of two groups to check their working and correct if needed. Repeat this activity to the other groups. Appreciate them for their good working.

Activity 2:

Give them worksheet. Instruct them to follow instructions and complete the given worksheet. Roam around the class, check their working and guide them if required.

Sum Up: (3 mins)

Sum up the lesson by explaining students the notable notes given at page 76 of their textbook.

Assessment: (5 mins)

To assess the learning of the students ask them to how many times the decimal point moves to the left when we divide it by 10, 100 and 1000.

Homework: (2 mins)

Solve Q1(e-h) of "Learning Check 4.4" at page 79 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

2. Divide 9.34 by 10, 100 and 1000.

3. Divide 10.5 by 10, 100 and 1000.

4. Divide 2.34 by 10, 100 and 1000.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 7**

Unit Name: Decimals and Percentages **Topic:** Division of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a 3-digit numbers up to 2 decimal places by a whole number up to 2-digit.

Solve real life situations involving division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 76-79

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their previous day homework.

Ask students to tell: How we divide a number by 10, 100 and 1000? How many point the decimal point moves towards the left when we divide a decimal number by 10, 100 and 1000. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(30 mins)

Activity:

Have students to open their textbook page 76. Tell them that today we are going to learn about the division of decimal number by whole numbers up to 2-digits. Tell them there are two methods to divide the decimal number by whole number first is by converting them to fraction and second one is direct method. Tell them that today we will divide decimal number by whole number by converting decimal number to fraction. Ask them to read the statement of the example given at textbook page 76. Ask them to read the statement and tell what is given and what we have to find. Take their responses and tell them that in Ramadan, Aliya bought 9.45 kg of dates and put them equally in 15 packets. We have to find the dates she pack in one packet. For this we have to divide 9.45 by 15. To divide first convert 9.45 into fraction and then divide it by 15.

$$9.45 = \frac{945}{100}$$

$$9.45 \div 15 = \frac{945}{100} \times \frac{1}{15} = \frac{945}{100 \times 15} = \frac{945}{1500} = 0.63 \text{ kg}$$

So she pack 0.63 kg of dates in each packet.

Now ask students to solve the example 2 given at textbook page 76 of their textbook in their notebook.

Roam around the class, check their work and guide them if required.

Sum Up:

(3 mins)

Sum up the lesson by re-telling the students how we divide a decimal number by converting them into fraction by solving example on the board.

Assessment:

(5 mins)

To assess the students ask them to solve the “Quick Check” given at page 77 of their textbook.

Homework:

(2 mins)

Solve Q2(a-c) of “Learning Check 4.4” at page 79 of their textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 1**

Unit Name: Decimals and Percentages **Topic:** Division of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a 3-digit numbers up to 2 decimal places by a whole number up to 2-digit.

Solve real life situations involving division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 77-79

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their previous day homework.

Ask student: How we can divide a decimal number by a whole number by converting them into fraction.

Take their responses and appreciate them for their correct answer. Call a student to the front of the class and ask him/her to write a decimal number and a 2-digit whole number and then divide them by converting them into fraction. Ask the rest of the class to check and correct if needed.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students to open their textbook page 77. Tell them that today we will divide a decimal number by a 2-digit whole number by direct method. Tell them that when we divide a decimal number by a whole number first ignore the decimal point and divide them as we divide whole numbers.

Let us divide 4.68 by 12.

After this count the number of digits in the dividend after the decimal point. There are two digits after the decimal point. Now count the same number of digits from the ones place of the quotient that 39 and put the decimal point exactly where it is in the dividend. So the answer is 0.39

Ask students to write one decimal number and a whole number in their notebook and divide it by using direct method. Roam around the class, check their work and guide them if required. Appreciate them for their good work.

$$\begin{array}{r}
 0.39 \text{ (Quotient)} \\
 12 \overline{) 4.68 \text{ (Dividend)}} \\
 \underline{- 36} \\
 108 \\
 \underline{- 108} \\
 0
 \end{array}$$

Sum Up:

(3 mins)

Sum up the lesson by explaining the steps of division of decimal numbers and whole number by direct method.

Assessment:

(5 mins)

To assess the learning of the students ask them to solve Q2(d, e) of “Learning check 4.4” at page 79 of their textbook in their notebook.

Homework:

(2 mins)

Solve Q2(f-h) of “Learning check 4.4” at page 79 of their textbook in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 2**

Unit Name: Decimals and Percentages **Topic:** Division of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a 3-digit number up to 2 decimal places by a 2-digit number up to 1 decimal place.

Solve real life situations involving division of 3 – digit numbers up to 2 decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 78 and 79

Teaching & Learning Activities:

Opening Activities/Warm-up:

(3 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their previous day homework.

Ask students to tell: How many methods to divide a decimal number by a whole number. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(25 mins)

Activity 1:

Have students to open their textbook page 78. Tell them that today we are going to learn about the division of decimal number by decimal numbers. Tell them there are two methods to divide the decimal numbers, first is by converting them to fraction and second one is direct method. Tell them that today we will divide decimal numbers by converting decimal number to fraction. Ask them to read the statement of the example given at textbook page 78. We have to divide 5.28 by 3.3. for this we convert both decimal numbers to fractions that is:

$$5.28 = \frac{528}{100}, 3.3 = \frac{33}{10}$$

Now we divide them as:

$$\begin{aligned} 5.28 \div 3.3 &= \frac{528}{100} \div \frac{33}{10} \\ &= \frac{528}{100} \times \frac{10}{33} \\ &= \frac{528 \times 10}{100 \times 33} \\ &= \frac{5280}{3300} = 16/10 = 1.6 \end{aligned}$$

Explain each step to students by solving another example of division of two decimal numbers.

Sum Up:

(3 mins)

Sum up the lesson by explaining the steps of division of decimal number by decimal number by converting them to fraction.

Assessment:

(5 mins)

To assess the students learning ask them to solve “Quick Check” given at page 78 by using method of converting them to fraction in their notebook.

Homework:

(2 mins)

Solve Q3 of Learning Check 4.4 at page 79 of their textbook in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 3**

Unit Name: Decimals and Percentages **Topic:** Division of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Divide a 3-digit number up to 2 decimal places by a 2- digit number up to 1 decimal place.

Solve real life situations involving division of 3 – digit numbers up to 2 decimal places.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 78 and 79

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them to tell the steps to divide a decimal number by a decimal number by converting them into fraction. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 mins)

Have students to open their textbook page 78. Tell them that today we will divide a decimal number by a 2-digit decimal number up to 1-decimal number by direct method. Tell them that when we divide a decimal number by a decimal number first convert the divisor to a whole number and then simply divide them.

Let us divide 8.52 by 1.2.

To convert 1.2 to whole number we will multiply both 8.52 and 1.2 by a suitable multiply of 10.

$$\begin{aligned}
 8.52 \div 1.2 &= \frac{8.52}{1.2} \div \frac{1.2}{1.2} \\
 &= \frac{8.52 \times 10}{1.2 \times 10} \\
 &= \frac{85.2}{12}
 \end{aligned}$$

$$\begin{array}{r}
 7.1 \\
 12 \overline{) 85.2} \\
 \underline{- 84} \\
 12 \\
 \underline{- 12} \\
 0
 \end{array}$$

Now simply divide 85.2 by 12 on the board and explain each step to them.

So we get $8.52 \div 1.2 = 7.1$

Explain the direct method and each step to divide decimal numbers by direct method solve another example on the board.

Ask students to write two decimal number in their notebook and divide it by using direct method. Roam around the class, check their work and guide them if required. Appreciate them for their good work.

Sum Up:

(3 mins)

Sum up the lesson by re-telling students how we divide a 3-digit decimal number up to 2-decimal places by a 2-digit decimal number up to 1-decimal place.

Assessment:

(5 mins)

To assess the understanding of the students ask them to solve “Quick check” given at page 79 of their textbook in their notebook.

Homework:

(2 mins)

Solve Q4, Q5 and Q6 of Learning Check 4.4 at page 79 and 80 of their textbook in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 4**

Unit Name: Decimals and Percentages **Topic:** Converting Fraction to Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert fractions to decimals using division.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 80 and 81, flashcards of fractional numbers

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students to tell in how many ways we multiply and divide the decimal numbers by whole numbers and decimal numbers. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

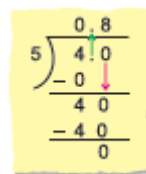
(20 mins)

Activity 1:

Tell students today we will learn about conversion of fractions to decimals. Have students to open their textbook page 80 and tell them that Saad has a pizza and he ate $\frac{4}{5}$ of the pizza. Tell them that we find the pizza that he ate in decimal number. For this we have to divide 4 by 5.

Now divide 4 by 5 step by step and explain each step to student tell them that by dividing 4 by 5 we get 0.8 a decimal number.

Write the example 2 that is convert $\frac{9}{5}$ to decimal on the board and call a student to the front of the class and ask him/her to convert it into decimal number by dividing 9 by 5. Take his/her response and appreciate if he/she done correct.



Activity 2:

Make two groups of students. Give each group some cards of fractional number. Instruct them to convert these fractions to decimal number. Roam around and instruct them to raise their hand when finished. now call one by one each group member to the front of the class and instruct them to show their working and rest of the class check their work and correct if any mistake.

Sum Up:

(3 mins)

Sum up the lesson by repeating with students how we can convert fraction to decimal by solving examples again on board.

Assessment:

(10 mins)

To assess the students understanding ask them to solve “Quick Check” given at page 81 of their textbook in their notebook.

Homework:

(2 mins)

Solve Q1, Q2 and Q3 of ‘Learning Check 4.5’ at page 81 of their textbook in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 5**

Unit Name: Decimals and Percentages **Topic:** Rounding off Decimals **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Round off a 4-digit number up to 3-decimal places to the nearest tenth.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 81 and 82

Teaching & Learning Activities:

Opening Activities/Warm-up:

(3 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask them to tell how we can convert the fraction to decimal. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 mins)

Activity 1:

Tell students today we will learn about rounding off decimal numbers to the nearest tenths. Ask them: Do you know what is meant by rounding off? Take their responses and appreciate if someone gives the right answer. Tell them that rounding off decimal means to find an estimated value which is easier to use in different calculations.

Write 8.678 on the board and tell them that we round off the decimal number to the nearest tenths. Tell them that there are some rules to round off numbers to nearest tenths, first look at the digit at hundredths place if the digit at hundredths place is 5 or greater than 5 then we add one to the tenths place digit and remove the remaining digits from right. If the digit at the hundredths place is less than 5 then the tenths place digit remains the same and remove the remaining digits from right. Tell them that to round off the number 8.678 to the nearest tenth look at the digit at the hundredths place that is 7 as 7 is greater than 5 so we add 1 to the tenths place digit and remove the remaining digits to its right.

$8.678 \approx 8.7$

Now call a student to the front of the class and ask him/her to round off the number 5.749 to the nearest tenths in example 2. Take his/her response and appreciate if he/she done correct.

Sum Up:

(8 mins)

Sum up the lesson by explaining the students how to round off decimal numbers to nearest 10.

Assessment:

(5 mins)

To assess students ask them to write some decimal numbers in their notebooks and then round off that decimal numbers to nearest tenths.

Homework:

(2 mins)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 6**

Unit Name: Decimals and Percentages **Topic:** Rounding off Decimals **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Round off a 4-digit number up to 3-decimal places to the nearest hundredth.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 82 and 83

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask them to tell how we can round off decimal numbers to the nearest tenths. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (22 mins)

Activity 1:

Tell students today we will learn about rounding off decimal numbers to the nearest hundredths.

Write 2.856 on the board and tell them that we round off the decimal number to the nearest hundredths.

tell them that there are some rules to round off numbers to nearest hundredths, first look at the digit at thousandth place if the digit at thousandths place is 5 or greater than 5 then we add one to the hundredths place digit and remove the remaining digits from right. If the digit at the thousandths place is less than 5 then the hundredth place digit remains the same and remove the remaining digits from right. Tell them that to round off the number 2.856 to the nearest hundredth look at the digit at the thousandths place that is 6 as 6 is greater than 5 so we add 1 to the hundredths place digit and remove the remaining digits to its right.

$2.856 \approx 2.86$

Now call a student to the front of the class and ask him/her to round off the number 2.123 to the nearest tenths in example 2. Take his/her response and appreciate if he/she done correct.

Sum Up: (8 mins)

Sum up the lesson by explaining the students how to round off decimal numbers to nearest hundredths.

Assessment: (5 mins)

To assess students ask them to write some decimal numbers in their notebooks and then round off that decimal numbers to nearest hundredths.

Homework: (2 mins)

Solve Q1 of "learning check 4.6" given at page 83 of their textbook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 7**

Unit Name: Decimals and Percentage **Topic:** Estimating Sum and Difference of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Estimate sum or difference of the numbers (up to 4 - digit).

Resource Material:

Chalk/Marker, White/Blackboard, textbook page 83 and 84

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students to tell the rules to round off the decimal numbers to nearest tenths and hundredths. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(30 mins)

Activity:

Tell students to day we will learn to estimate the sum of two decimal numbers. Ask students to open their textbook page 83 and read the statement of the example. The capacity of small and big aquarium is given and we have to estimate the capacity of both aquariums and then verify your answer.

Tell students to estimate the capacity of both aquariums first we round off the capacity of both aquariums to the nearest whole number.

$$12.5 \approx 13$$

$$18.4 \approx 18$$

Tell them that now we add the estimated values as $13 + 18 = 31$

So the total capacity of both aquariums together is approximately 31 litres. Now to verify our estimation we add 12.5 and 18.4.

$$12.5 + 18.4 = 30.9 \approx 31$$

Tell them that as our estimation is close to the actual value so our estimation is correct.

Sum Up:

(5 mins)

Sum up the lesson by re-telling students how we estimate the sum of two decimal numbers and then verify the answer by actual sum.

Assessment:

(0 mins)

To assess the students learning ask them to solve "Quick check" given at page 84 of their textbook in their notebook.

Homework:

(0 mins)

Solve Q1 of "Learning check 4.7" in their textbook page 84 in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 1**

Unit Name: Decimals and Percentage **Topic:** Estimating Sum and Difference of Decimals **Date:**

Objective(s):

At the end of this period, the students will be able to:

Estimate sum or difference of the numbers (up to 4 - digit).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 22-26

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students to tell how e estimate the sum of two decimal number and then how we verify out estimation is correct or not. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(30 mins)

Activity:

Tell students to day we will learn to estimate the difference of two decimal numbers. Ask students to open their textbook page 84. Write the example 2 estimate the difference of 45.9 and 32.2 on the board. Tell them that first we round off the given decimal numbers to nearest whole numbers.

$$45.9 \approx 46$$

$$32.2 \approx 32$$

Tell them that now we subtract the estimated values as $46 - 32 = 14$. To verify our estimation, we subtract 32.2 from 45.9.

$$45.9 - 32.2 = 13.7 \approx 14$$

Tell them that as our estimation is close to the actual value so our estimation is correct.

Sum Up:

(5 mins)

Sum up the lesson by re-telling students how we estimate the difference of two decimal numbers and then verify the answer by finding actual difference.

Assessment:

(0 mins)

To assess the students learning ask them to solve "Quick check" given at page 84 of their textbook in their notebook.

Homework:

(0 mins)

Solve Q2 of "Learning check 4.7" in their textbook page 85 in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 2**

Unit Name: Decimals and Percentage

Topic: Percentages

Date:

Objective(s):

At the end of this period, the students will be able to:

Recognise percentage as a special kind of fraction.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 85 and 86

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: Do you know about percentage? Take their responses and appreciate them if someone gives the right answer.

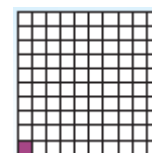
Main Activities/Concept Building:

(25 mins)

Activity 1:

Show students a grid paper of square shape with 100 equal boxes with one colour box. Tell students as 1 square is coloured out of 100 equal parts then we can show this in fraction form as $\frac{1}{100}$. Tell students a fraction whose denominator is 100 can be written in the form of percentage and 1% or we can say that 1% of the square is coloured.

$1\% = \frac{1}{100}$



Have students to open their textbook page 85 and read the statement of the example that Ahmad got 76 marks out of 100 marks. We can show this in fraction as $\frac{76}{100}$. Tell them that as denominator is 100 so in percentage we can write it as 76%. And we read it as seventy-six percent.

Ask student to look at the example at page 86 and write that in form of percentage.

Sum Up:

(3 mins)

Sum up the lesson by explaining the terms percentage to students that this another way of writing fraction.

Assessment:

(5 mins)

To assess students learning ask them to solve Q1(a, b, c) of “Learning check 4.8” in their textbook page 86. Roam around the class, check their work and guide them if required.

Homework:

(2 mins)

Solve Q1 (d, e, f) of “Learning check 4.8” in their textbook page 86.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 3**

Unit Name: Decimals and Percentage

Topic: Percentages

Date:

Objective(s):

At the end of this period, the students will be able to:

Recognise percentage as a special kind of fraction.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 87, fractional cards of percentages and fraction number cards

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students to what is another way to write fractional number. Take their responses and tell them that percentage is another way to write fractional numbers,

Main Activities/Concept Building:

(25 mins)

Activity 1:

Make pairs of students. give each pair a square grid paper with 100 square boxes. Put some fractional card on the table. Call one by one each pair to the front of the class and instruct them to choose two cards and then colour the square grid according to the given fractional cards and then represent it in form of percentage. Call one by one each pair to front of the class and ask them to show their working to the whole class. Ask the rest of the class to check their working and correct if any mistake. Appreciate them for their good work.

Activity 2:

Make two groups of students. give one group fractional card and the other group the percentage card. Instruct the first group to show a fractional number card and the other group show percentage of that fractional card. Repeat this activity again by giving first group the percentage cards and the second group the fraction number card. Appreciate them for their good work.

Sum Up:

(3 mins)

Sum up the lesson by explaining the how we can represent a fraction whose denominator is 100.

Assessment:

(5 mins)

To assess students learning ask them to solve Q2 of “Learning check 4.8” in their textbook page 87. Roam around the class, check their work and guide them if required.

Homework:

(2 mins)

Solve Q3 of “Learning check 4.8” in their textbook page 87.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 4**

Unit Name: Decimals and Percentage **Topic:** Converting fractions to percentage **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert fraction to percentage and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 59 and 60

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: what is meant by percentage? How we can represent a fraction as percentage. Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building: (25 mins)

Activity 1:

Tell students today we will learn about conversion of fraction to percentage. Write a fraction $\frac{3}{10}$ on the board and tell them that now we convert $\frac{3}{10}$ into percentage by multiplying $\frac{3}{10}$ by 100.

$$\frac{3}{10} = \frac{3}{10} \times 100\% = 30\%$$

Have student to open their textbook page 88. Ask students to solve example 1 and 2 in their notebook.

Roam around the class, check their work and guide them if required.

Activity 2:

Give them worksheet and ask them to complete the given worksheet by following instructions. Roam around the class and check their work and discuss with them about their common mistakes. Appreciate them for their good work.

Sum Up: (3 mins)

Sum up the lesson by repeating the steps to convert fractions to percentage by solving different examples on the board.

Assessment: (5 mins)

To assess the student learning ask them to solve “Quick check given at page 88 of their textbook. Roam around the class, check their work and guide them if required.

Homework: (2 mins)

Solve Q2 of “Learning check 4.9” at page 90 given in the textbook in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Convert the following fractions to percentage.

$$\frac{2}{20}$$

$$\frac{5}{35}$$

$$\frac{1}{2}$$

$$\frac{3}{5}$$

$$\frac{13}{50}$$

$$\frac{7}{30}$$

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 5**

Unit Name: Decimals and Percentage **Topic:** Converting fractions to percentage **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert fraction to percentage and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 88 and 90

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students to tell how we can convert fraction to percentage. Ask them to convert $\frac{3}{4}$ into percentage. Roam around and check their work and guide them if required.

Main Activities/Concept Building: (30 mins)

Activity 1:

Tell students today we will learn about conversion of percentage to fraction. Tell them that when we convert percentage to fraction first remove the % symbol and write 100 in the denominator.

Write 45% on the board and then convert it into fraction remove the percentage symbol and write 100 to the denominator of 45 as"

$$45\% = \frac{45}{100} = \frac{9}{20}$$

Have students to open their textbook page 88 and solve the examples given at page in their notebook.

Roam around the class, check their work and guide them if required.

Activity 1:

Make small groups of students. Give each group some flash cards of numbers in percentage and instruct them to convert these percentages into fraction and then write them in simplest form. Roam around the class and check their work and discuss with them their common mistakes.

Sum Up: (3 mins)

Sum up the lesson by re-telling students the steps to convert percentage to fraction by solving examples on the board.

Assessment: (5 mins)

To assess the student learning ask them to solve "Quick check given at page 88 of their textbook. Roam around the class, check their work and guide them if required.

Homework: (2 mins)

Solve Q1 of "Learning check 4.9" at page 90 given in the textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 6**

Unit Name: Decimals and Percentage **Topic:** Converting Decimal to percentage **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert decimal to percentage and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 63, 64 and 66

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: how we can convert percentage to fraction and vice versa take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 mins)

Activity 1:

Tell students today we will learn about conversion of decimal to percentage. Write a decimal 0.83 on the board and tell them that now we convert 0.83 into percentage first convert 0.83 into fraction and then multiply it 100.

$$0.83 = \frac{83}{100} \times 100\% = 83\%$$

Have student to open their textbook page 89. Ask students to solve example 1 and 2 in their notebook. Roam around the class, check their work and guide them if required.

Activity 2:

Give them worksheet and ask them to complete the given worksheet by following instructions. Roam around the class and check their work and discuss with them about their common mistakes. Appreciate them for their good work.

Sum Up: (3 mins)

Sum up the lesson by repeating the steps to convert decimals to percentage by solving different examples on the board.

Assessment: (5 mins)

To assess the student learning ask them to solve “Quick check given at page 89 of their textbook. Roam around the class, check their work and guide them if required.

Homework: (2 mins)

Solve Q4 of “Learning check 4.9” at page 90 given in the textbook in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Convert the following decimals to percentage.

0.23

3.4

1.44

4.08

0.01

2.33

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 7**

Unit Name: Decimals and Percentage **Topic:** Converting Decimal and percentage **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert decimal to percentage and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 63, 64 and 66

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students to tell how we can convert decimal to percentage. Ask them to convert 0.09 into percentage. Roam around and check their work and guide them if required.

Main Activities/Concept Building: (30 mins)

Activity 1:

Tell students today we will learn about conversion of percentage to decimal. Tell them that when we convert percentage to decimal first convert percentage to fraction and then decimal.

Write 11% on the board and then convert it into fraction remove the percentage symbol and write 100 to the denominator of 11 and then we convert it into decimal.

$$11\% = 11/100 = 0.11$$

Have students to open their textbook page 89 and solve the examples given at page in their notebook.

Roam around the class, check their work and guide them if required.

Activity 1:

Make small groups of students. give each group some flash cards of numbers in percentage and instruct them to convert these percentages into fraction and then into decimal form. Roam around the class and check their work and discuss with them their common mistakes.

Sum Up: (3 mins)

Sum up the lesson by re-telling students the steps to convert percentage to decimals by solving examples on the board.

Assessment: (5 mins)

To assess the student learning ask them to solve "Quick check given at page 89 of their textbook. Roam around the class, check their work and guide them if required.

Homework: (2 mins)

Solve Q3 of "Learning check 4.9" at page 90 given in the textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 1**

Unit Name: Decimals and Percentage

Topic: Revision

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of arranging decimals and addition and subtraction of decimals of the unit decimal and percentage.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students:

How we arrange decimal numbers in ascending and descending order?

How can we add the decimal numbers?

How can we subtract the decimal numbers?.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Arrange the 3.23, 4.28 and 2.24 in ascending and descending order.

2. Add the following

$$4.445 + 2.113$$

$$7.089 + 1.004$$

3. Subtract the following.

$$6.714 - 4.232$$

$$9.342 - 5.203$$

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2

Periodic Unit: 1

Week: 5

Lesson Plan: 2

Unit Name: Decimals and Percentage

Topic: Revision

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of multiplication of decimals of the unit “Decimal and percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to multiplication of decimals.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

5. Multiply 6.09 with 10, 100 and 1000.

6. Multiply the following.

$$1.89 \times 48$$

$$4.32 \times 5.6$$

7. There are 34.8 kg of flour in one packet. How many flour are in such 12 packets.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 Periodic Unit: 1 Week: 5 Lesson Plan: 3

Unit Name: Decimals and Percentage **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of division of decimals of the unit “Decimal and percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to division of decimals.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 mins)

N/A

Homework: (0 mins)

N/A

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Worksheet

Name: _____

Date: _____

8. Divide 9.34 by 10, 100 and 1000.

9. Divide the following.

$$3.14 \div 22$$

$$8.64 \div 1.4$$

10. 45.3 kilograms of sugar is divided into 3 packets. How many sugar are in each packet.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 4**

Unit Name: Decimals and Percentage **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of conversion of fractions to decimals of the unit “Decimals and Percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to conversion of fractions to decimals.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 mins)

N/A

Homework: (0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Convert the following fractions to decimals.

a) $\frac{1}{2}$

b) $\frac{9}{8}$

c) $\frac{5}{7}$

d) $\frac{1}{8}$

2. Asad do his math homework in $\frac{7}{8}$ hours. Find the hours he spends in

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 5**

Unit Name: Decimals and Percentage

Topic: Revision

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of rounding off and estimate sum and difference of the decimals of the unit “Decimals and Percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to rounding off decimals and how to estimate sum and difference of decimals.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Reason/Comments:

Worksheet

Name: _____

Date: _____

2. Round off 3.725 to the nearest tenths and hundredths.

3. Estimate the sums of 2.54 and 3.22. Then verify your answer estimation by actual calculation.

4. Estimate the difference of 78.9 and 10.3. Then verify your answer estimation by actual calculation.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2

Periodic Unit: 1

Week: 5

Lesson Plan: 6

Unit Name: Decimals and Percentage

Topic: Revision

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of percentage of the unit “Decimals and Percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to percentage.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 mins)

N/A

Homework:

(0 mins)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Worksheet

Name: _____

Date: _____

1. Write the following as percentage.

a) 28 out of 100

b) 69 out of 100

2. Colour the squares according to the given percentages.

45%

98%

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Term: 2 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 7**

Unit Name: Decimals and Percentage **Topic:** Revision **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of Converting fraction, decimals numbers and percentage of the unit “Decimals and Percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 mins)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to conversion of fractions, decimal numbers and percentages.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 mins)

Activity:

Give the worksheet to students. Instruct them to complete the worksheet. Roam around the class, check their work and guide them if needed.

Sum Up: (5 mins)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 mins)

N/A

Homework: (0 mins)

N/A

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK & FEDERAL)	Mathematics	5		40 Mins

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Worksheet

Name: _____

Date: _____

1. Convert the following into percentage.

$$\frac{4}{10}$$

$$\frac{23}{50}$$

0.34

0.99

2. Convert the following percentage to fraction and then decimals.

12%

79%

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 1**

Unit Name: Decimals and Percentage **Topic: Real-life situations involving percentage** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real-life situations involving percentages.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 90 and 91

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask the students: How are you? Encourage them to say, “Alhamdulillah”.

Start with ‘Bismillah’ and tell them to recite it before starting any work.

Ask students: Do you know about percentage?

How can we convert a percentage to a fraction and a decimal number?

How can we convert fractions and decimals to percentage?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building:

(25 min)

Activity 1:

Tell students today we are going to learn about uses of percentage in our daily life.

Write the statement: “There are 250 trees in a farm. If 40% of the trees are mango trees then how many mango trees are there?”

Ask students to read the statement and tell what is given and what we have to find.

Take their responses and tell them that the

number of trees in the farm is given and the percentage of mango trees is given. We have to find the number of mango trees. Now solve it step by step on the board and explain each step to them.

Total number of trees = 250

Mango trees = 40%

Number of mango trees = 40% of 250

$$= \frac{40}{100} \times 250 = 100$$

Activity 2:

Instruct students to open their textbooks to page 90. Ask them to read the statement of example 1 and tell what is given and what we have to find. Take their responses and appreciate if someone gives the right answer. Now call a student to the front of the class and ask him/her to solve it step by step on the board. Explain each step to the whole class. Instruct the rest of the class to check his/her work and correct if needed. Appreciate him/her for good work.

Sum Up:

(3 min)

Sum up the lesson by retelling students about the uses of percentage in our daily life.

Assessment:

(5 min)

To assess the learning of the students, ask them to solve “Quick Check” given on page 90 of their textbooks in their notebooks.

Homework:

(2 min)

Solve Q1 of “Learning Check 4.10” on page 91 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 2**

Unit Name: Decimals and Percentage **Topic: Real-life situations involving percentage** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real-life situations involving percentages.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 91 and 92

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Write the statement “10% of students of a school are absent. If the number of students in the school are 900, then how many students are absent?” Ask students to read the statement and tell what is given and what we have to find. Take their responses and appreciate them for their correct answer. Call a student to the front of the class and ask him/her to solve it on the board.

Main Activities/Concept Building:

(30 min)

Activity 1:

Instruct students to work in pairs. Ask each pair to make their own real-life situation involving percentage. Roam around the class and check their work. Instruct them to raise their hands when done. Now call one pair of students to the front of the class and ask them to present their work to the whole class. Have them solve their problem on the board. Ask the rest of the class to check their work and correct if required. Repeat this activity with each pair of the class. Appreciate them for their good work.

Activity 2:

Have students to open their textbooks to page 91 and read the statement of example 2. Ask them to tell what is given and what we have to find. Take their responses and then ask them to solve the example in their notebooks. Roam around the class, check their work and guide them if required.

Sum Up:

(3 min)

Sum up the lesson by retelling the students how we can solve the problem related to percentage in our daily life.

Assessment:

(5 min)

To assess the students, ask them to solve Q2 of “Learning Check 4.10” given on page 91 of their textbooks in their notebooks.

Homework:

(2 min)

Solve Q3 and Q4 of “Learning Check 4.10” on page 92 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 3**

Unit Name: Decimals and Percentage **Topic: Summary and Review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 92 and 93

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Decimals and Percentage”.

Ask them the following questions to let them revise the basic concepts:

- How can we compare and arrange decimal numbers?
- How can we add and subtract decimal numbers?
- How can we multiply decimal numbers?

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open page 93 of their textbooks. Ask them to solve Q1 and Q2 of “Unit Check 4” in their textbooks. Ask them to solve Q3 and Q4 in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given on page 92.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q5-Q9 of “Unit Check 4” given on pages 93 and 94 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 4**

Unit Name: Decimals and Percentage **Topic: Summary and Review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 92 and 94

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Decimals and Percentage”.

Ask them the following questions to let them revise the basic concepts:

- How can we compare and arrange decimal numbers?
- How can we add and subtract decimal numbers?
- How can we multiply decimal numbers?

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open page 94 of their textbooks. Ask them to solve Q10 to Q14 of “Unit Check 4” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given on page 92.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q15-Q17 of “Unit Check 4” given on page 94 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 5**

Unit Name: Distance and Time **Topic: Conversion of Units of Distance** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert measures given in kilometres to metres and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 95, 96, 97 and 99

Teaching & Learning Activities:

Opening Activities/Warm-up: (8 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Show flash cards of different objects to students. Ask them to tell which object is measured in metres, centimetres and which distance is measured in kilometres.

Main Activities/Concept Building: (20 min)

Activity 1:

Ask them to open their textbooks to page 95. Ask them to look at the picture and the question given on the page. Ask them if they can answer it. Take responses and tell them that they will get to know the answer after completing this topic.

Write the statement of the example: “A train covers a distance of 55 kilometres. How much distance did the train cover in metres?” Ask students: How many metres are in one kilometre? Take their responses and tell them that there are 1000 metres in one kilometre. Tell them that to convert 55 kilometres to metres, we have to multiply it by 1000. So to convert 55 km to m, we have to multiply 55 by 1000.

$$55 \text{ km} = 55 \times 1000 \text{ m} = 55000 \text{ m}$$

Tell them that we can also convert metres to kilometres. Write 32000 m on the board and tell them that we will now convert metres to kilometres. Ask them: How to convert metres to kilometres? Take their responses and tell them that we can convert metres to kilometres by dividing metres by 1000.

$$32000 \text{ m} = 32000 \div 1000 \text{ km} = 32 \text{ km}$$

Activity 2:

Ask students to open their textbooks to pages 96 and 97. Instruct them to solve the examples given in the textbook in their notebooks. Roam around and check their work. Discuss with them their common mistakes. Also explain the answer to students for the question given on page 95.

Sum Up: (3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert kilometres to metres, we multiply the number of kilometres by 1000. When we convert a smaller unit to a larger unit, we divide. So to convert metres to kilometres, we divide the number of metres by 1000. Explain “Notable Notes” given on pages 96 and 97 of their textbooks.

Assessment: (10 min)

To assess the students understanding, ask them to solve “Quick Check” given on page 96 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q1 (a-i) of “Learning Check 5.1” on page 99 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 6**

Unit Name: Distance and Time **Topic: Conversion of Units of Distance** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Convert measures given in metres to centimetres and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 97, 98 and 99

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How can we convert kilometres to metres and from metres to kilometres? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building:

(20 min)

Activity 1:

Write the statement of the example: “The length of the wire is 3 m 15 cm. What is the length of the wire in centimetres?” Ask students: How many centimetres are in one metre? Take their responses and tell them that there are 100 centimetres in one metre. Tell them that to convert 3 m 15 cm to centimetres, we first multiply 3 m by 100 and then add 15 into it.

$$3 \text{ m } 15 \text{ cm} = 3 \times 100 \text{ cm} + 15 \text{ cm} = 300 \text{ cm} + 15 \text{ cm} = 315 \text{ cm}$$

Tell them that we can also convert centimetres to metres. Write 4500 on the board and tell them that we will now convert centimetres to metres. Ask them: How can we convert centimetres to metres? Take their responses and tell them that we can convert centimetres to metres by dividing centimetres by 100.

$$4500 \text{ cm} = 4500 \div 1000 \text{ m} = 45 \text{ m}$$

Activity 2:

Ask students to open their textbooks to pages 97 and 98. Instruct them to solve the examples given in the textbook in their notebooks. Roam around and check their work. Discuss with them their common mistakes.

Sum Up:

(3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert metres to centimetres, we multiply the number of metres by 100. When we convert a smaller unit to a larger unit, we divide. So to convert centimetres to metres, we divide the number of centimetres by 100. Explain “Notable Note” given on page 97 of their textbooks.

Assessment:

(10 min)

To assess the students understanding, ask them to solve “Quick Check” given on pages 97 and 98 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework:

(2 min)

Solve Q1 (j-o) of “Learning Check 5.1” on page 99 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 7**

Unit Name: Distance and Time **Topic: Conversion of Units of Distance** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert measures given in centimetres to millimetres and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 98 and 99

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How can we convert metres to centimetres? How can we convert centimetres to metres? Take their responses and appreciate them for their correct responses.

Main Activities/Concept Building: (20 min)

Activity 1:

Write the statement of the example: “The length of the book is 18 cm 4 mm. What is the length of the book in millimetres?” Ask students: How many millimetres are in one centimetre? Take their responses and tell them that there are 10 millimetres in one centimetre. Tell them that to convert 18 cm 4 mm to millimetres, we first multiply 18 cm by 10 and then add 4 mm into it.

$$18 \text{ cm } 4 \text{ mm} = 18 \times 10 \text{ mm} + 4 \text{ mm} = 180 \text{ mm} + 4 \text{ mm} = 184 \text{ mm}$$

Tell them that we can also convert millimetres to centimetres. Write 210 mm on the board and tell them that we will now convert millimetres to centimetres. Ask them: How can we convert millimetres to centimetres? Take their responses and tell them that we can convert millimetres to centimetres by dividing millimetres by 10.

$$210 \text{ mm} = 210 \div 10 \text{ cm} = 21 \text{ cm}$$

Activity 2:

Ask students to open their textbooks to pages 98 and 99. Instruct them to solve the examples given in the textbooks in their notebooks. Roam around the class and check their work. Discuss with them their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert centimetres to millimetres, we multiply the number of centimetres by 10. When we convert a smaller unit to a larger unit, we divide. So to convert millimetres to centimetres, we divide the number of millimetres by 10. Explain “Notable Note” given on pages 98 and 99 of their textbooks.

Assessment: (10 min)

To assess the students understanding, ask them solve “Quick Check” given on page 99 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q1 (p-u) of “Learning Check 5.1” on page 99 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐ Not Achieved ☐ Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 1**

Unit Name: Distance and Time **Topic: Addition and Subtraction of Distance** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real-life situations involving conversion, addition and subtraction of measures of distance.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 100 and 101

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them: How can we convert km to m? How can we convert m to cm? How can we convert cm to mm and vice versa? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the statement: “The length of one wire is 5 m 72 cm and the length of the other wire is 7 m 49 cm. What is the length of both wires in centimetres?” Instruct them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that the length of two wires is given and we have to find the total length of both wires. For this we have to add 5 m 72 cm and 7 m 49 cm. Tell them that to add these, first we write the lengths of both wires vertically and then add the centimetres. $72 \text{ cm} + 49 \text{ cm} = 121 \text{ cm} = 1 \text{ m } 21 \text{ cm}$

Length of one wire	=	5 m 72 cm
Length of the another wire	=	+ 7 m 49 cm
Total length of both wires	=	13 m 21 cm

As we know that there are 100 cm in one metre so we write 21 to the cm place and take 100 cm = 1 m to the metres place. Now add the metres: $1 \text{ m} + 5 \text{ m} + 7 \text{ m} = 13 \text{ m}$.

Now we find the length of both wires in cm:

$$13 \text{ m } 21 \text{ cm} = 13 \times 100 + 21 \text{ cm} = 1300 + 21 \text{ cm} = 1321 \text{ cm}$$

Then solve the example step by step on the board and explain each step.

Activity 2:

Make pairs of students and ask them to write some units of length and then add these units of length. After doing this, call each pair one by one to the front of the class and ask them to show their working to the whole class. Then solve the sums on the board. Appreciate them for their correct work.

Sum Up: (5 min)

Sum up the lesson by asking students to open their textbooks to page 100 and solve example 1 in their notebooks.

Assessment: (5 min)

To assess the students learning, ask them to solve Q2 of “Learning Check 5.2” given on page 101 of their textbooks.

Homework: (2 min)

Solve Q3 and Q4 of “Learning Check 5.2” given on page 101 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 2**

Unit Name: Distance and Time **Topic: Addition and Subtraction of Distance** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real-life situations involving conversion, addition and subtraction of measures of distance.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 100 and 101

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework.

Ask students: How can we add the units of length with carrying? Call a student to the front of the class and ask him/her to write the units of length in metres and centimetres. Then add the units of length. Tell them to always add metres in metres and centimetres in centimetres.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the statement: "The running track in one park is 3 km 528 m long and in another park it is 4 km 499 m. What is the difference between the lengths of the tracks of both parks?" Instruct them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that the length of the tracks of both parks is given and we have to find the difference between the lengths of both tracks. For this we have to subtract 3 km 528 m from 4 km 499 m. We have to subtract 17 m 24 cm from 19 m 12 cm. First write the numbers vertically and subtract metres from metres. Point towards the 528 m and tell them that we cannot subtract 528 from 499 so we borrow 1 km = 1000 m from 4 km. Now we have 1000 + 499 = 1499 m. Then subtract 528 m from 1499 m: $1499 \text{ m} - 528 \text{ m} = 971 \text{ m}$

Length of one running track	=	4 km 499 m
Length of another running track	=	– 3 km 528 m
Difference	=	0 km 971 m

After subtracting metres, we subtract kilometres.

3 km = 3 km = 0 km

So the difference between the lengths of both parks is 971 m.

Activity 2:

Make pairs of students and ask them to write some units of length and then subtract these units of length. After doing this, call each pair one by one to the front of the class and ask them to show their working to the whole class. Then solve the sums on the board. Appreciate them for their correct work.

Sum Up: (5 min)

Sum up the lesson by asking students to open their textbooks to pages 100 and 101. Solve example 2 in their notebooks.

Assessment: (5 min)

To assess the students learning, ask them about the clue words that are used for addition and subtraction. Tell them that by using the clue words, make real-life problems of addition and subtraction of units of length.

Homework: (2 min)

Solve Q1 of "Learning Check 5.2" given on page 101 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 3**

Unit Name: Distance and Time **Topic: Conversion of Units of Time** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert hours to minutes and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 102 and 105

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: What is the standard unit of time? How many minutes are in one hour? How many hours are there in a day? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (20 min)

Activity 1:

Write the statement of the example: “Ali spends 5 hours at school. How many minutes does he spends at school?” Ask students: Do you know how many minutes there are in one hour? Take their responses and tell them that there are 60 minutes in one hour. Tell them that to convert 5 hours to minutes, we multiply 5 by 60.

$$5 \text{ hours} = 5 \times 60 \text{ min} = 300 \text{ min}$$

Tell them that we can also convert minutes to hours. Write 480 min on the board and tell them that we will now convert minutes to hours. Ask them: How can we convert minutes to hours? Take their responses and tell them that to convert minutes to hours, we divide the number of minutes by 60.

$$480 \text{ min} = 480 \div 60 \text{ hours} = 8 \text{ hours}$$

Activity 2:

Ask students to open their textbooks to page 102. Instruct them to solve the examples related to conversion of hours to minutes and minutes to hours given in the textbook in their notebooks. Roam around the class and check their work. Discuss with them their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert hours to minutes, we multiply it by 60. When we convert a smaller unit to a larger unit, we divide. So to convert minutes to hours, we divide the number of minutes by 60. Explain “Notable Note” given on page 102 of their textbooks.

Assessment: (10 min)

To assess the students understanding, ask them to solve “Quick Check” given on page 102 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q1 (a-e) of “Learning Check 5.3” on page 105 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 4**

Unit Name: Distance and Time **Topic: Conversion of Units of Time** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert minutes to seconds and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 102, 103 and 105

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask students:

How can we convert a larger unit to a smaller unit?

How many seconds are in one minute?

How many minutes are in 20 hours? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(20 min)

Activity 1:

Write the statement of the example: “Usman goes to nearby park daily and walks there for 45 minutes. How many seconds does he walk?” Ask students: Do you know how many seconds there are in one minute? Take their responses and tell them that there are 60 second in one minute. Tell them that to convert 45 minutes to seconds, we multiply 45 by 60.

$$45 \text{ minutes} = 45 \times 60 \text{ sec} = 2700 \text{ sec}$$

Tell them that we can also convert seconds to minutes. Write 360 seconds on the board and tell them that we will now convert seconds to minutes. Ask them: How can we convert seconds to minutes? Take their responses and tell them that to convert second to minutes, we divide the number of seconds by 60.

$$360 \text{ sec} = 360 \div 60 \text{ hours} = 6 \text{ hours}$$

Activity 2:

Ask students to open their textbooks to pages 102 and 103. Instruct them to solve the examples related to conversion of minutes to seconds and seconds to minutes given in the textbook in their notebooks. Roam around the class and check their work. Discuss with them their common mistakes.

Sum Up:

(3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert minutes to seconds, we multiply it by 60. When we convert a smaller unit to a larger unit, we divide. So to convert seconds to minutes, we divide the number of minutes by 60. Explain “Notable Note” given on page 102 of their textbooks.

Assessment:

(10 min)

To assess the students understanding, ask them to convert 6 minutes 45 seconds to seconds in their notebooks. Roam around the class, check their work and guide them if required.

Homework:

(2 min)

Solve Q1 (f-i) of “Learning Check 5.3” on page 105 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 5**

Unit Name: Distance and Time

Topic: Conversion of Units of Time

Date:

Objective(s):

At the end of this period, the students will be able to:

Convert years to months and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 103 and 105

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask students: How many months are in a year?

How can we convert years to months? Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building:

(20 min)

Activity 1:

Write the statement of the example: “Fawaz spends 7 years in Dubai. How many months does he spend in Dubai?” Ask students: Do you know how many months are in a year? Take their responses and tell them that there are 12 months in one year. Tell them that to convert 7 years to months, we multiply the number of years by 12.

$$7 \text{ years} = 7 \times 12 \text{ months} = 84 \text{ months}$$

Tell them that we can also convert months to years. Write 108 months on the board and tell them that we will now convert months to years. Ask them: How can we convert months to years? Take their responses and tell them that to convert months to years, we divide the number of months by 12.

$$108 \text{ months} = 108 \div 12 \text{ year} = 9 \text{ years}$$

Activity 2:

Ask students to open their textbooks to page 103. Instruct them to solve the examples related to conversion of years to months and months to years given in the textbook in their notebooks. Roam around the class and check their work. Discuss with them their common mistakes.

Sum Up:

(3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert years to months, we multiply it by 12. When we convert a smaller unit to a larger unit, we divide. So to convert months to years, we divide it by 12. Explain “Notable Note” given at page 103 of their textbooks.

Assessment:

(10 min)

To assess the students understanding, ask them to solve “Quick Check” given on page 103 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework:

(2 min)

Solve Q2 (a, d, g, h) of “Learning Check 5.3” on page 105 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 6**

Unit Name: Distance and Time **Topic: Conversion of Units of Time** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert months to days and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 103, 104 and 105

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask students: How many months are in a year?

How can we convert years to months and months to years? Write some years on the board and ask them to tell how many months in are each. Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building: (20 min)

Activity 1:

Write the statement of the example: “Hania completed her project in 3 months. In how many day did she complete her project?” Ask students: Do you know how many days are in a month? Take their responses and tell them that there are 30 days in a month. Tell them that to convert 3 months to days, we multiply 3 by 30.

$$3 \text{ months} = 3 \times 30 \text{ days} = 90 \text{ days}$$

Tell them that we can also convert days to months. Write 60 days on the board and tell them that we will now convert days into months. Ask them: How can we convert days to months? Take their responses and tell them that to convert days to months, we divide the number of days by 30.

$$60 \text{ days} = 60 \div 30 \text{ months} = 2 \text{ months}$$

Activity 2:

Ask students to open their textbooks to pages 103 and 104. Instruct them to solve the examples related to conversion of months to days and days to months given in the textbook in their notebooks. Roam around the class and check their work. Discuss with them their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert months to days, we multiply months by 12. When we convert a smaller unit to a larger unit, we divide. So to convert days to months, we divide the number of days by 12 (Notable Note).

Assessment: (10 min)

To assess the students understanding, ask them to solve “Quick Check” given on page 104 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q2 (c, e) of “Learning Check 5.3” on page 105 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 7**

Unit Name: Distance and Time **Topic: Conversion of Units of Time** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Convert weeks to days and vice versa.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 104 and 105

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask students: How many days are in one month?

How can we convert months to days and days to months? Write 420 days and 13 months on the board and instruct them to convert days to months and given months to days. Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building: (20 min)

Activity 1:

Write the statement of the example: “Hammad spends 4 weeks and 3 days at his grandmother’s home.

How many days does he spend at his grandmother’s home?” Ask students: Do you know how many days are in a week? Take their responses and tell them that there are 7 days in a week. Tell them that to convert 4 weeks 3 days to days, we multiply the number of weeks by 7 and then add days into it.

$$4 \text{ week } 3 \text{ days} = 4 \times 7 \text{ days} + 3 \text{ days} = 28 \text{ days} + 3 \text{ days} = 31 \text{ days}$$

Tell them that we can also convert days to weeks. Write 35 days on the board and tell them that we will now convert days into weeks. Ask them: How can we convert days to weeks? Take their responses and tell them that to convert days to weeks, we divide the number of days by 7.

$$35 \text{ days} = 35 \div 7 \text{ weeks} = 5 \text{ weeks}$$

Activity 2:

Ask students to open their textbooks to page 104. Instruct them to solve the examples related to conversion of weeks to days and days to weeks given in the textbook in their notebooks. Roam around the class and check their work. Discuss with them their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining to students that when we convert a larger unit to a smaller unit, we always multiply. When we convert weeks to days, we multiply months by 7. When we convert a smaller unit to a larger unit, we divide. So to convert days to weeks, we divide the number of days by 7 (Notable Note).

Assessment: (10 min)

To assess the students understanding, ask them to solve “Quick Check” given on page 104 of their textbooks in their notebooks. Roam around the class, check their work and guide them if required.

Homework: (2 min)

Solve Q2 (f, i) of “Learning Check 5.3” on page 105 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 1**

Unit Name: Distance and Time **Topic:** Addition and Subtraction of Hours and Minutes **Date:**

Objective(s):

At the end of this period, the students will be able to:

Add and subtract intervals of time in hours and minutes with carrying and borrowing.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 106-107

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: How many days are in a month? How many days are in a week?

How many months are in a year?

Take their responses and appreciate them for their good work.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the time "4 hours and 15 minutes and 2 hours and 56 minutes" on the board. Tell students today we are going to add the units of time. Tell them that first we add the minutes and then the hours. Now write the numbers vertically. First add minutes: 15 minutes + 56 minutes = 71 minutes = 60 minutes + 11 minutes. As we know that there are 60 minutes in one hour so write 11 minutes in the minute's column and take 60 minutes = 1 hour to the hour's column. Now add the hours:

$$1 \text{ hour} + 4 \text{ hours} + 2 \text{ hours} = 7 \text{ hours.}$$

Explain each step to students.

Activity 2:

Ask students to open their textbooks to page 105. Instruct them to solve example 1 in their notebooks. Now call a student to the front of the class and ask him/her to write example 1 given in the textbook on the board. Solve it step by step and explain each step to students.

Sum Up: (3 min)

Sum up the lesson by retelling students that when we add units of time, we always add minutes in minutes and hours in hours.

Assessment: (5 min)

To assess the students learning, ask them to solve Q1 (a, b) of "Learning Check 5.4" given on page 106 of their textbooks.

Homework: (2 min)

Solve Q1 (c, g) and Q2 (a, b, f, h) of "Learning Check 5.4" given on pages 106 and 107 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 2**

Unit Name: Distance and Time **Topic:** Addition and Subtraction of Hours and Minutes **Date:**

Objective(s):

At the end of this period, the students will be able to:

Add and subtract intervals of time in hours and minutes with carrying and borrowing.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 105-107

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How can we add units of time? Take their responses and write units of time in hours and minutes on the board. Ask students to solve it in their notebooks.

Take their responses and appreciate them for their good work.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the time “6 hours and 57 minutes and 12 hours and 45 minutes” on the board. Tell students today we are going to learn how to subtract the units of time. Tell them that first we subtract minutes from minutes and then hours from hours. Now write the numbers vertically. First subtract minutes as 57 minutes cannot be subtracted from 45 so we borrow 1 hour = 60 minutes from 12 hours. Now we have 11 hours and 105 minutes. Then we subtract 57 minutes from 105 minutes.

$$105 \text{ minutes} - 57 \text{ minutes} = 48 \text{ minutes}$$

Now subtract the hours: 11 hours – 6 hours = 5 hours.

Activity 2:

Ask students to open their textbooks to page 106. Instruct them to solve example 2 in their notebooks.

Now call a student to the front of the class and ask him/her to write example 2 given in the textbook on the board. Solve it step by step and explain each step to students.

Sum Up: (3 min)

Sum up the lesson by retelling students that when we subtract units of time, we always subtract minutes from minutes and hours from hours.

Assessment: (5 min)

To assess the students learning, ask them to solve Q1 (d, e, f) of “Learning Check 5.4” given on page 106 of their textbooks.

Homework: (2 min)

Solve Q1 (h, i) and Q2 (c, d, e, g) of “Learning Check 5.4” given on pages 106 and 107 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 3**

Unit Name: Distance and Time **Topic:** Real-life Situations of Time **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real-life situations involving conversion, addition and subtraction of intervals of time.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 107-108

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them: How can we add and subtract units of time with carrying and borrowing? Take their responses and instruct them to write units of time in hours and minutes in their notebooks. First add the units of time and then subtract the smaller units from the greater units. Roam around the class, check their work and guide them if required.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the statement: “Raza spent 1 hour 40 minutes for Math and 1 hour 15 minutes for English homework. How much total time did he spend doing homework?” Instruct them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that time for completing Maths and English homework is given and we have to find total time for completing both homework. For this, we have to add these. First add the minutes and then add the hours. Now solve the example step by step on the board and explain each step to students.

Time spent for Math homework	=	1 h 40 min
Time spent for English homework	=	+ 1 h 15 min
Total time spent	=	2 h 55 min

Activity 2:

Make pairs of students and ask them to write some units of time and then add these units of time. After doing this, call each pair one by one to the front of the class and ask them to show their working to the whole class. Then solve the sums on the board. Appreciate them for their correct work. Ask students to open their textbooks to page 107 and solve example 1 in their notebooks step by step. Then call a student to the front of the class and ask him/her to solve the example on the board and explain each step to students. Appreciate him/her for their good effort.

Sum Up: (3 min)

Sum up the lesson by retelling students how to add the units of time.

Assessment: (5 min)

To assess the students learning, ask them to solve Q1 of “Learning Check 5.5” given on page 108 of their textbooks.

Homework: (2 min)

Solve Q2 and Q3 of “Learning Check 5.5” given on page 108 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 4**

Unit Name: Distance and Time

Topic: Real-life Situations of Time

Date:

Objective(s):

At the end of this period, the students will be able to:

Solve real-life situations involving conversion, addition and subtraction of intervals of time.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 107-108

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework.

Ask students: How can we add the units of time with carrying? Call a student to the front of the class and ask him/her to write the units of time in hours and minutes then add the units of time. Tell them to always add minutes in minutes and hours in hours.

Main Activities/Concept Building:

(25 min)

Activity 1:

Write the statement on the board: “Dania is 5 years 4 months old and Mohid is 2 years 7 months old. Find the difference between their ages in months?” Instruct them to read the statement of the example and tell what is given and what we have to find. Take their responses and tell them that the age of Dania and Mohid is given and we have to find the difference between their ages. For this we have to subtract 2 years 7 months from 4 years 4 months. First subtract the months, as 7 months cannot be subtracted from 4 months so we borrow 1 year = 12 months from the year column. Now we have 16 months.

$$16 \text{ months} - 7 \text{ months} = 9 \text{ months}$$

After subtracting months, we subtract years: 3 years – 2 years = 1 year

We want to find the difference between their ages in months so:

$$1 \text{ year } 9 \text{ months} = 1 \times 12 \text{ months} + 9 \text{ months} = 21 \text{ months}$$

Activity 2:

Make pairs of students and ask them to write some units of time and then subtract these units of time.

After doing this, call each pair one by one to the front of the class and ask them to show their working to the whole class. Then solve the sums on the board. Appreciate them for their correct work. Ask students to open their textbooks to pages 107 and 108. Solve example 2 in their notebooks step by step and then call a student to the front of the class. Ask him/her to solve the example on the board and explain each step to students. Appreciate him/her for their good effort.

Sum Up:

(3 min)

Sum up the lesson by retelling students how to subtract the units of time and tell them to always subtract the smaller unit from the greater one.

Assessment:

(5 min)

To assess the students learning, ask them to solve Q4 of “Learning Check 5.5” given on page 108 of their textbooks.

Homework:

(2 min)

Solve Q5 of “Learning Check 5.5” given on page 108 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Dania’s age	=	4 years	4 months
Mohid’s age	=	– 2 years	7 months
Difference	=	1 year	9 months

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 5**

Unit Name: Distance and Time **Topic:** Summary and Review Exercise **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 109 and 110

Teaching & Learning Activities:

Opening Activities/Warm-up: (3 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Distance and Time”.

Ask them a few questions to let them revise the basic concepts:

Ask students: What are the standard units of distance and time?

How can we convert the units of distance from smaller to larger and vice versa?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open pages 109 and 110 of their textbooks. Ask them to solve Q1 of “Unit Check 5” in their textbooks. Ask them to solve Q2 and Q3 in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given on page 109.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q4 of “Unit Check 5” on page 110 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 6**

Unit Name: Distance and Time **Topic:** Summary and Review Exercise **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 82 and 83

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Distance and Time”.

Ask them a few questions to let them revise the basic concepts:

Ask students: What are the standard units of distance and time?

How can we convert the units of distance from smaller to larger and vice versa?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open pages 109 and 110 of their textbooks. Ask them to solve Q5, Q6 and Q7 of “Unit Check 5” of their textbooks in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given on page 109.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q8 of “Unit Check 5” on page 110 of their textbooks in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 7**

Unit Name: Unitary Method **Topic:** Unitary method **Date:**

Objective(s):

At the end of this period, the students will be able to:

Calculate the value of many objects of the same kind when the value of one of these objects is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 111, 112, 113 and 114

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: If you buy a pencil for Rs 10, then what is the cost of 5 such pencils? Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building: (30 min)

Activity 1:

Ask them to open their textbooks to page 111. Ask them to look at the picture and the question given on the page. Ask them if they can answer it. Take responses and tell them that they will get to know the answer after completing this topic.

Tell students today we will learn about unitary method. Ask them: Do you know about unitary method? Take their responses and appreciate if someone gives the right answer. Tell students when we go for shopping and want to buy vegetables, fruits, books, rice, etc. we can see the price tag on the things. The price tag shows the value of a single item or pack. Tell them that to find the value of many items, we have to use the unitary method. Write the example: “Ahmad bought 5 kg of rice. If the cost of 1 kg rice is Rs 150, then how much money did he pay the shopkeeper?”

Instruct students to read the statement and tell what is given and what we have to find. Take their responses and tell them that the cost of one kilogram of rice is given and we have to find the cost of 5 kg of rice. When the price of one quantity is given and we have to find the price of multiple items then we multiply.

So we multiply 5 by Rs 150 to get the price of five kg of rice. Explain to students the formula that is used to find the value of many items.

Cost of 1kg rice =	Rs 150
Number of Kg =	5 kg
Cost of 5 kg rice =	Rs 150 × 5 = Rs750

Value of many items = value of 1 item × number of items

Now solve step by step on the board and explain each step to students.

Ask students to open their textbooks to page 112 and learn about the unitary method.

Sum Up: (5 min)

Sum up the lesson by retelling students how to find the value of many objects when the value of one item is given. Explain the answer of the question that is given on page 111 of their textbooks.

Assessment: (0 min)

To assess the students learning, ask them to solve “Quick Check” given on page 113 of their textbooks in their notebooks.

Homework: (0 min)

Solve Q1, Q2 and Q3 of “Learning Check 6.1” in their textbooks on page 114 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 1**

Unit Name: Unitary Method

Topic: Unitary method

Date:

Objective(s):

At the end of this period, the students will be able to:

Calculate the value of many objects of the same kind when the value of one of these objects is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 112, 113 and 114

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: What is meant by unitary method? Take their responses and explain “Notable Note” given on page 112 to them.

Main Activities/Concept Building:

(30 min)

Activity 1:

Instruct students to work in pairs. Ask them to write the word problem related to find the value of multiple items when the value of one item is given. Roam around the class and check their work. Instruct them to raise their hands when finished. Now call one pair to the front of the class and ask them to present their work to the whole class. Ask them to write the statement on the board and explain each step to the whole class. Instruct the rest of the class to check their work and correct if needed. Repeat this activity with each pair of the class.

Activity 2:

Ask students to open their textbooks to page 113 and instruct them to solve the examples given in the textbook in their notebooks. Roam around the class, check their work and guide them where needed. Discuss with them their common mistakes. Appreciate them for their good work and active participation in class.

Sum Up:

(5 min)

Sum up the lesson by retelling students we can get the value of many items by multiplying the value of one item with the number of items.

Assessment:

(0 min)

To assess the students learning, ask them to solve Q4 of “Learning Check 6.1” given on page 114 of their textbooks in their notebooks.

Homework:

(0 min)

Solve Q5 of “Learning Check 6.1” in their textbooks on page 114 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 2**

Unit Name: Unitary Method **Topic:** Unitary method **Date:**

Objective(s):

At the end of this period, the students will be able to:

Calculate the value of one object of the same kind when the value of many of these objects is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 115 and 116

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How we can find the price of many objects when the value of one object is given? Take their responses and call a student to the front of the class and ask him/her to write the formula to find the value of many objects when the value of 1 object is given. Take his/her response and appreciate them for their good work.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we are going to learn about finding the value of one object when the value of a number of objects is given. Write the statement: “A carpenter made 4 chairs in 12 days. In how many days did he make one chair?” Instruct them to read the statement and tell what is given and what we have to find.

Take their responses and tell them the carpenter made 4 chairs in 12 days is given and we have to find the days in which one chair was made. Tell students to find the number of days, we divide the number of days by the number of chairs. Solve the example step by step on the board and explain each step to students.

Activity 2:

Ask students to open their textbooks to page 115 and explain to students the formula that is used to find the value of many items:

$$\text{Value of one item} = \text{Value of many items} \div \text{number of items}$$

Ask them to read the statement of example 1. Then call a student to the front of the class and ask him/her to solve the example on the board step by step. Also explain each step to the whole class.

Sum Up: (3 min)

Sum up the lesson by retelling students how we can find the value of one object when the value of a number of objects is given. Explain the “Notable Note” that is given on page 115 of their textbooks.

Assessment: (5 min)

To assess the students learning, ask them to solve “Quick Check” given on page 115 of their textbooks in their notebooks.

Homework: (2 min)

Solve Q1, Q2 and Q3 of “Learning Check 6.2” in their textbooks on page 116 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 3**

Unit Name: Unitary Method **Topic:** Unitary method **Date:**

Objective(s):

At the end of this period, the students will be able to:

Calculate the value of one object of the same kind when the value of many of these objects is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 115 and 116

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How can we find the value of one item when the value of many items is given? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building: (30 min)

Activity 1:

Instruct students to work in pairs. Ask them to write the word problem related to find the value of one item when the value of multiple items is given. Roam around the class and check their work. Instruct them to raise their hands when finished. Now call one pair of students to the front of the class and ask them to present their work to the whole class. Ask them to write the statement on the board and explain each step to the whole class. Instruct the rest of the class to check their work and correct if needed. Repeat this activity with each pair of the class.

Activity 2:

Ask students to open their textbooks to page 115 and instruct them to solve example 2 given in the textbook in their notebooks. Roam around the class, check their work and guide them where needed. Discuss with them their common mistakes. Appreciate them for their good work and active participation in class.

Sum Up: (5 min)

Sum up the lesson by retelling students we can get the value of one item by dividing the value of many items by the number of items.

Assessment: (0 min)

To assess the students learning, ask them to solve Q4 of “Learning Check 6.2” given on page 116 of their textbooks in their notebooks.

Homework: (0 min)

Solve Q5 of “Learning Check 6.2” in their textbooks on page 116 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 4**

Unit Name: Unitary Method

Topic: Unitary method

Date:

Objective(s):

At the end of this period, the students will be able to:

Calculate the value of many objects of the same kind when the value of some of these is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 116, 117 and 118

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: How can we find the value of one object when the value of a number of objects is given?" Take their responses that must be by dividing the value of many items by the number of items. Instruct them to write the problem related to finding the value of one object when the value of many object is given.

Main Activities/Concept Building:

(25 min)

Activity 1:

Tell students today we are going to learn about finding the value of a number of objects when the value of a different number of objects is given. Write the statement: "Amir bought 7 kg of mangoes in Rs 630. If he wants to buy 12 kg of mangoes, how much money does he need?" Instruct them to read the statement and tell what is given and what we have to find. Take their responses and tell them that the cost of 7 kg of mangoes is given and we have to find the cost of 12 kg of mangoes. Tell students to find the price of 12 kg of mangoes, first we find the price of 1 kg of mangoes. By dividing Rs 630 by 7, we get the price of one kg of mangoes. After this, multiply the price of 1 kg of mangoes by 12 to get the price of 12 kg of mangoes. Explain finding the value of a number of objects when the value of a different number of objects is given by solving different examples on the board.

Price of 7 kg of mangoes = Rs 630

Mangoes bought = 7 kg

Price of 1 kg of mangoes = $\text{Rs } 630 \div 7 = \text{Rs } 90$

Price of 12 kg of mangoes = $\text{Rs } 90 \times 12 = \text{Rs } 1080$

Activity 2:

Ask students to open their textbooks to page 116 and learn about the steps to find the value of a number of objects when the value of a different number of objects is given. Ask students to solve the "Quick Check" given on page 117. Roam around the class and check their work. Guide them if required. Appreciate them for their good work.

Sum Up:

(3 min)

Sum up the lesson by explaining to students the steps to find the value of a number of objects when the value of a different number of objects is given.

Assessment:

(5 min)

To assess the students learning, ask them to solve Q1 and Q2 of "Learning Check 6.3" given on page 118 of their textbooks in their notebooks.

Homework:

(2 min)

Solve Q3 and Q4 of "Learning Check 6.3" in their textbooks on page 118 in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 5**

Unit Name: Unitary Method

Topic: Unitary method

Date:

Objective(s):

At the end of this period, the students will be able to:

Calculate the value of many objects of the same kind when the value of some of these is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 117, 118 and 119

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How can we find the value of one item when the number of items given? How can we find the value of one item when the value of a number of item is given? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(20 min)

Activity 1:

Instruct students to work in pairs. Ask them to write the word problem related to finding the value of multiple items when the value of different number of objects is given. Roam around the class and check their work. Instruct them to raise their hands when finished. Now call one pair of students to the front of the class and ask them to present their work to the whole class. Ask them to write the statement on the board and explain each step to the whole class. Instruct the rest of the class to check their work and correct if needed. Repeat this activity with each pair of the class.

Activity 2:

Ask students to open their textbooks to page 117 and instruct them to solve the examples given in the textbook in their notebooks. Roam around the class, check their work and guide them where needed. Discuss with them their common mistakes. Appreciate them for their good work and active participation in class.

Sum Up:

(5 min)

Sum up the lesson by retelling students to find the value of multiple items, first we find the value of one item by dividing and then we find the number of a different number of items by multiplying (Notable Note).

Assessment:

(8 min)

To assess the students learning, ask them to solve Q5 and Q6 of “Learning Check 6.3” given on page 118 of their textbooks in their notebooks.

Homework:

(2 min)

Solve Q7 and Q8 of “Learning Check 6.3” in their textbooks on page 119 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 6**

Unit Name: Unitary Method **Topic:** Summary and Review Exercise **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 119 and 120

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Unitary method”.

Ask them a few questions to let them revise the basic concepts:

Ask students: What is meant by unitary method?

How can we find the value of many things when the value of one thing is given?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (30 min)

Activity 1:

Have students open pages 119 and 120 of their textbooks. Ask them to solve Q1 and Q2 of “Unit Check 6” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given on page 119.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise the classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 7**

Unit Name: Unitary Method **Topic:** Summary and Review Exercise **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 119 and 120

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Tell students that they are going to recall all the concepts of the Unit "Unitary method".

Ask them a few questions to let them revise the basic concepts:

Ask students: How can we find the value of one thing when the value of many things is given?

How can we find the value of many objects if the value of a different number of objects is given?

Take their responses and appreciate them for their correct answers.

Main Activities/Concept Building: (30 min)

Activity 1:

Have student open page 120 of their textbooks. Ask them to solve Q3 and Q4 of "Unit Check 6" in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given on page 119.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 1**

Unit Name: Decimals and Percentage **Topic:** Revision **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of real-life situations of percentage of the unit “Decimal and Percentage”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students:

What is meant by percentage?

How can we use percentage in our daily life?

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

- 1. Amir spent 8% of his savings on charity. Write this amount in fraction and decimal form.**

- 2. There are 500 cars in a parking lot and 70% are white. The rest are in other colours. Find the number of white cars.**

- 3. In a mathematical test, Harris got 27 marks out of 30. Find the percentage of his marks. Also express the answer as a decimal number.**

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 2**

Unit Name: Distance and Time **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of conversion of units of distance in unit “Distance and Time”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to conversion of units of distance.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

Convert the following.

4 km 32 m into m

455 cm to m and cm

78 mm to cm and mm

15 m 15 cm to cm

5000 m to km

90 mm to cm

788 cm to m and cm

4504 m to km and m

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 3**

Unit Name: Distance and Time **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of real-life situations of addition and subtraction of units of distance in unit “Distance and Time”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to addition and subtraction of units of distance.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. The distance between Asma's home and Ayesha's home is 15 km 42 m. The distance between Ayesha's home and Salma's home is 5 km 102 m. Find the total distance from Asma's home to Salma's home. Convert this distance in metres.

2. The length of Hina's volcano model is 295 cm 89 mm. The length of Sara's volcano model is 109 cm 55 mm. Find the difference between the length of the models. Convert the length of these models in millimetres.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 4**

Unit Name: Distance and Time **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of conversion of units of time in unit “Distance and Time”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to conversion units of time.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

Convert the following.

540 minutes to hours

114 minutes to seconds

72 months to days

144 days to weeks and days

455 days to months and days

524 minutes 13 seconds to seconds

640 minutes to hours and minutes

5 years 2 months to months

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 5**

Unit Name: Distance and Time **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of addition and subtraction of units of time in unit “Distance and Time”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to rounding off decimals and how to estimate the sum and difference of decimals.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Solve the following.

h min	h min	h min	h min
15 34	28 13	52 19	48 47
+ 23 35	– 11 55	+ 22 42	– 37 59

2. Ahmad spent 1 hour 54 minutes for Maths and 1 hour 21 minutes for Urdu homework. How much total time he spent doing his homework? Also convert the answer into minutes.

3. An electronics company spent 84 hours to complete a shipment and 48 hours to complete another shipment. How much more time did it take for the first shipment than the second? Convert the time spent into minutes.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 6**

Unit Name: Unitary method **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of unit “Unitary Method”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to unitary method.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Ali wants to buy 12 oranges. If the cost of 1 orange is Rs 8, then what is the cost of 12 oranges?

2. If the cost of one book is Rs 550, then what is the cost of 15 such books?

3. If the cost of 6 dresses of kids is Rs 9864, then what is the cost of one dress?

4. What is the cost of one bag if the cost of 44 bags is Rs 15620?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 2 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 7**

Unit Name: Unitary method **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of unit “Unitary Method”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to unitary method.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	SUN (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. A car travels a distance of 420 km in 6 hours. How much distance will the car travel in 15 hours?

2. There are 493 students in 17 classes. If the number of students in each class is the same, then how many students are there in 20 classes?

3. The cost of 5 geometry boxes is Rs 850. What is the cost of 12 such geometry boxes?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 1**

Unit Name: Geometry **Topic: Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recognise the standard units for measuring angles is 1° , which is defined as $1/360$ of a complete revolution.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 121 and 122, flash card of angle

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Tell students today we will learn about angle and standard units of angle. Ask students: Do you know about angle and its unit to measure? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building:

(25 min)

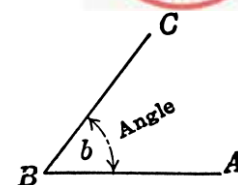
Activity 1:

Ask them to open their textbooks to page 121. Have them to look at the picture and the question given on the page. Ask them if they can answer it. Take responses and tell them that they will get to know the answer after completing this topic.

Tell students today we will learn about angle and its unit. Show a clock to students. Point out towards the hands of clock and tell them that the hands are making angle with each other. Draw an angle on the board and tell them when two ray meet at point they make angle. Now move the long hand from 12 to next small line and tell them that when the minute hand moves from 12 to next point one minute has passed similarly when we move from 0 of the protractor to the next point, the angle is of 1° . show the protractor and the angle to them. Now show the clock when there is 12 o'clock. And tell them that when the short hand completes the movement around the clock the both hands are at 12. Similarly, when angle complete its revolution then angle is of 360° .

Tell them that the unit to measure angle is degree and the symbol used for degrees is " $^\circ$ ".

Now draw an angle on the board and tell them that we can show the angles in 3 ways, that is $\angle ABC$ or $\angle CBA$ and $\angle B$



Sum Up:

(3 min)

Sum up the lesson by retelling students about the angle and its unit. Ask them to open their textbook page 122 and observe the angle that pizza slice make.

Assessment:

(5 min)

To assess the students, ask them to draw an angle and write the three ways to write angles.

Homework:

(2 min)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 2**

Unit Name: Geometry **Topic: Types of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Classify angles as acute, right or obtuse.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 122 and 123, Flash cards of angles (acute, obtuse, right), worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask some questions related to angles and the units of angle. Draw an angle on the board and ask students to tell the three ways of presenting angles.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about angles and its type. Ask students do you know about types of angles. Take their responses and appreciate if someone gives the right answer. Draw an angle of 90° on the board and tell them that when measure of angle is 90° or it is made up of horizontal and vertical lines is called right angle. Now draw an angle smaller than 90° and tell them that when the measure of angle is less than right angle it is called acute angle. Draw an angle greater than 90° and tell them that when measure of angle is greater than right angle then it is called obtuse angle.

Activity 2:

Make three groups of students according to the strength of the class and give each group flash cards of angles. Instruct first group to separate out the right angle, second group to separate out the acute angles and third one to separate out the obtuse angle flash cards. Roam around the class, check their work and guide them where needed. Instruct them to raise hand when finished. then ask them to come one by one to the front of the class and show their working to the whole class. The group with accurate working should be announced winner.

Sum Up: (3 min)

Sum up the lesson by retelling students what is the difference between right, acute and obtuse angle by drawing angles on the board. Ask them to open their textbook page 122 and 123 and learn about acute obtuse and right angle.

Assessment: (5 min)

To assess the students, ask them to about what is right, acute and obtuse angle. Ask them to tell the objects that make acute, obtuse and right angle.

Homework: (2 min)

Complete the given worksheet.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

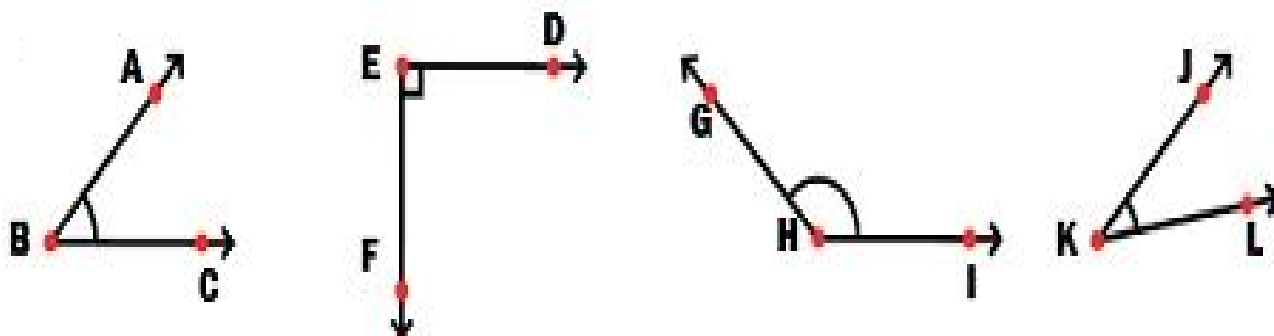
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

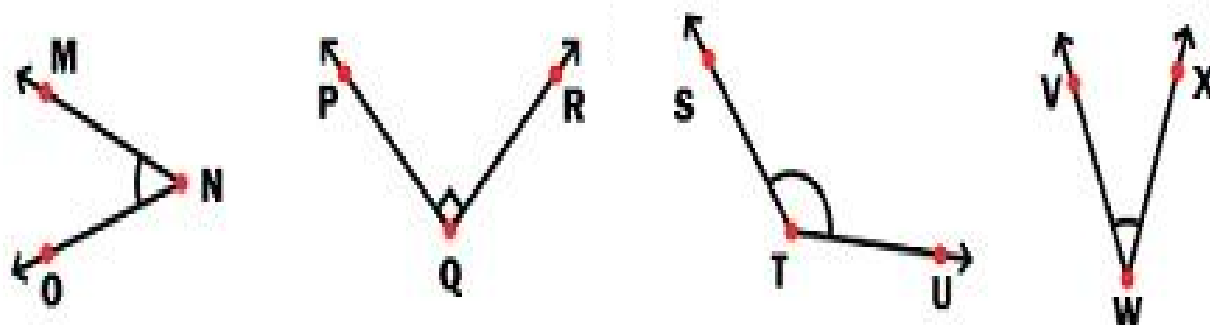
Name: _____

Date: _____

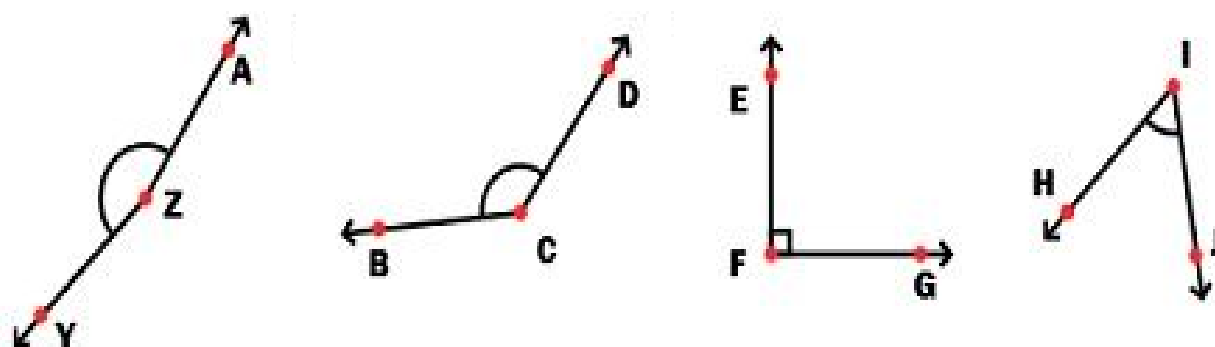
1. Tick (✓) the acute angle.



2. Tick(✓) the obtuse angle.



3. Tick (✓) the right angle.



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 3**

Unit Name: Geometry **Topic: Types of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recognise straight and reflex angle.

Compare angles with right angles and recognize that a straight line is equivalent to two right angles.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 122, 123 and 126-127, Flash cards of angles (mostly reflex and straight), Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Draw three angles (acute, obtuse and right angle) and ask students to tell the name of these angles. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about angles and its type. Ask students do you know about types of angles. Take their responses and appreciate if someone gives the right answer. Draw an angle of 90° on the board and tell them that when measure of angle is 90° or it is made up of horizontal and vertical lines is called right angle. Now draw a straight angle and tell them that when the measure of angle is twice of right angle it is called straight angle of 180° . Draw an angle greater than 180° and tell them that when measure of angle is greater than straight angle then it is called reflex angle.

Activity 2:

Make two groups of students according to the strength of the class and give each group flash cards of angles. Instruct first group to separate out the straight and second group to separate out the reflex angles flash cards. Roam around the class, check their work and guide them where needed. Instruct them to raise hand when finished. then ask them to come one by one to the front of the class and show their working to the whole class. The group with accurate working should be announced winner.

Sum Up: (3 min)

Sum up the lesson by retelling students what is the difference between straight and reflex angle by comparing it with right angle. Ask them to open their textbook page 122 and 123 and learn about reflex and straight angle

Assessment: (5 min)

To assess the students, ask them to about what is straight and reflex angle. Ask them to tell the objects that make these angles. Ask them to solve Q1 and Q2 of "Learning Check 7.1" at page 126 and 127 of their textbook.

Homework: (2 min)

Complete the given worksheet.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

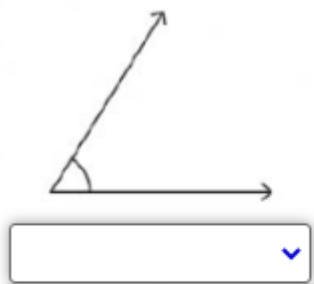
Worksheet

Name: _____

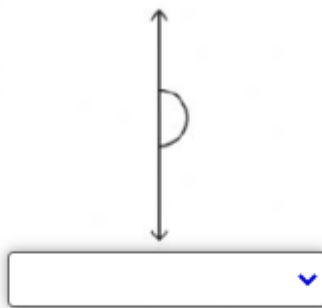
Date: _____

1. Write the name of each angle.

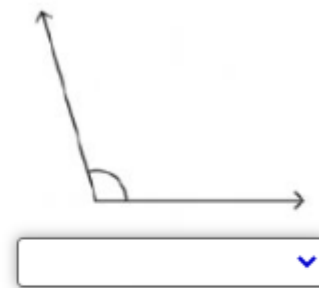
1)



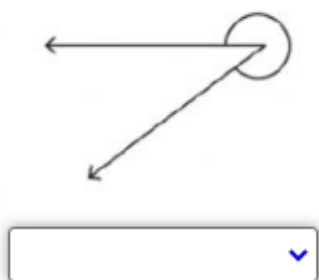
2)



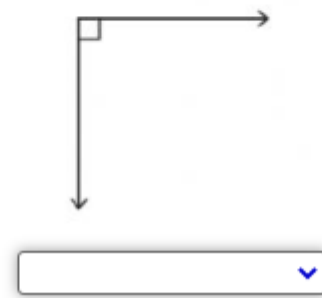
3)



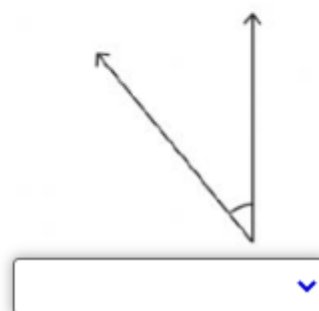
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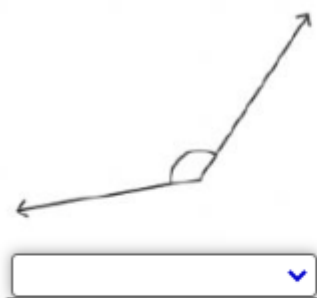
5)



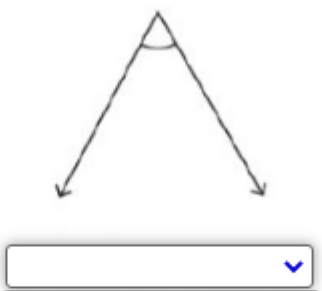
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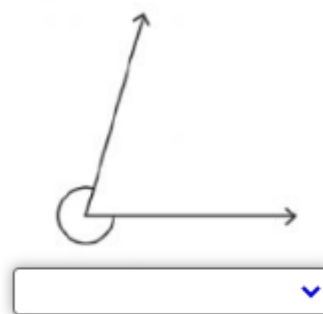
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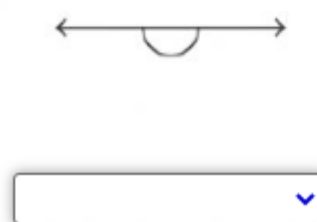
8)



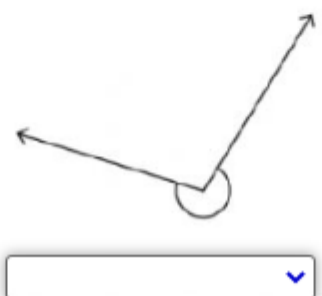
9)



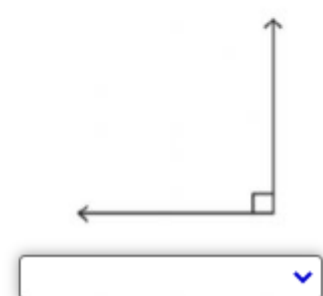
10)



11)



12)



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 4**

Unit Name: Geometry **Topic: Construction of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct a right angle.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 124 and 127, Protractor, Ruler

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

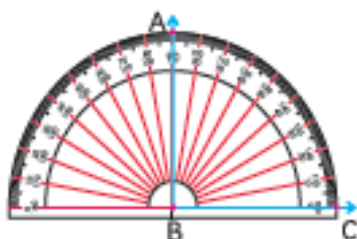
Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Show flash cards of angles (right, acute, obtuse, straight and reflex angles) to students and ask them to identify and tell the name of each angle. Appreciate them for their correct answer.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about to draw an right angle with the help of protractor and ruler. Tell students first draw ray BC with the help of ruler . Then place the protractor on the ray BC such the centre point of the protractor is at B. base line of the protractor is along the line BC. Now look at upper scale of the protractor and mark a point at angle 90° as this angle is right angle. Now remove the protractor and join B to C this is a right angle.



Activity 2:

Ask students to draw a right angle DEF with the help of ruler and protractor in their notebook and write the steps to draw angle. Roam around the class, check their work and guide where needed. Now ask them to come one by one to the front of the class and show their work to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by asking students to open their textbooks to pages 124 and observe the steps of drawing right angle.

Assessment: (8 min)

To assess the students learning, ask them to tell the steps of drawing right angle. And then ask them to write the steps in their notebook for practice.

Homework: (2 min)

Solve Q3(a) of "Learning Check 7.1" at page 127 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 5**

Unit Name: Geometry **Topic: Construction of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct a straight angle.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 124, 125 and 127, Protractor, Ruler

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

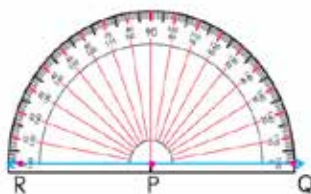
Ask students about their homework. Ask students: "What is a unit fraction?" Take their responses and then draw different shapes on the board with different parts. Call a student to the front of the class and ask him/her to shade one part of each shape to show a unit fraction. Take their responses and appreciate them for their correct response.

Main Activities/Concept Building:

(22 min)

Activity 1:

Tell students today we will learn about to draw a straight angle with the help of protractor and ruler. Tell students first draw ray PQ with the help of ruler. Then place the protractor on the ray PQ such the centre point of the protractor is at P. base line of the protractor is along the line PQ. Now look at lower scale of the protractor and mark a point at angle 180° as this angle is straight angle. Now remove the protractor and join P to R this is a straight angle.



Activity 2:

Ask students to draw a straight angle XYZ with the help of ruler and protractor in their notebook and write the steps to draw angle. Roam around the class, check their work and guide where needed. Now ask them to come one by one to the front of the class and show their work to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Sum Up:

(3 min)

Sum up the lesson by asking students to open their textbooks to pages 124 and 125 and observe the steps of drawing straight angle.

Assessment:

(8 min)

To assess the students learning, ask them to tell the steps of drawing straight angle. And then ask them to write the steps in their notebook for practice.

Homework:

(2 min)

Solve Q3(b) of "Learning Check 7.1" at page 127 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 6**

Unit Name: Geometry **Topic: Construction of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct reflex angles of different measures.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 125, 126 and 127, Protractor and ruler

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

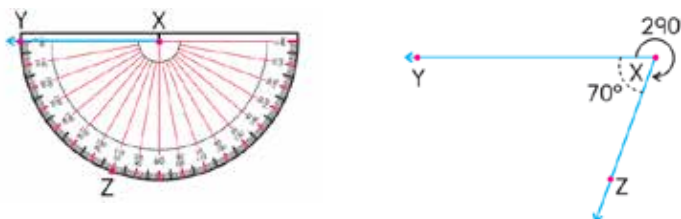
Ask students about their homework. Draw a rectangle with 7 equal parts and shade 4 parts of it. Ask students: "What fraction of the rectangle is shaded?" "What is the fraction of the unshaded parts of the rectangle?" Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 min)

Activity 1:

Tell students today we will learn about to draw a reflex angle with the help of protractor and ruler. Tell students first draw ray XY with the help of ruler. Then place the protractor on the ray BC such the centre point of the protractor is at X. base line of the protractor is along the line XY. Now look at upper scale of the protractor and mark a point at angle 70° . The angle 290° is the reflex angle. Now remove the protractor and join X to C this is a reflex angle.



Activity 2:

Ask students to draw a Reflex angle of ABC with the help of ruler and protractor in the their notebook and write the steps to draw angle. Roam around the class, check their work and guide where needed. Now ask them to come one by one to the front of the class and show their work to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Sum Up:

(3 min)

Sum up the lesson by asking students to open their textbooks to pages 125 and 126 and observe the steps of drawing reflex angle and different reflex angles at page 126.

Assessment:

(8 min)

To assess the students learning, ask them to tell the steps of drawing reflex angle. And then ask them to write the steps in their notebook for practice.

Homework:

(2 min)

Solve Q3(c-g) of "Learning Check 7.1" at page 127 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 1** **Lesson Plan: 7**

Unit Name: Geometry **Topic: Pairs of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Describe adjacent, complementary and supplementary angles.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 127, 128 and 129

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask them: How we draw right angle? How we draw straight angle?

How we draw reflex angle? Ask them to tell the steps to draw the angles? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(25 min)

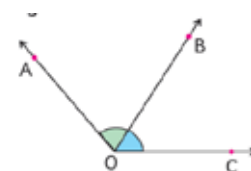
Activity 1:

Tell students today we will learn about pairs of angles. Draw a pair angle on the board.

Point out towards the angle and instruct them to observe the pair of angles. Tell them that we have angle AOB and angle BOC. Tell them that the point O that is called the vertex of the angle is common vertex of both angle.

Then point out towards the common ray OB of the pair of the angles and tell them that OB is the common ray of both angles. Tell them that when we draw two angles such that they have common arm and common vertex then that angles is called the adjacent angles.

Draw different pairs of adjacent angles on the board and explain about them students.



Activity 2:

Make pairs of students and ask them to draw a pair of angles that is adjacent and one pair of angle that is not adjacent. Roam around the class, check their work and guide them where needed. Ask them to come one by one to the front of the class and show their work to the whole class. Appreciate them for their good work. Ask students to open their textbook page 127 and 128 and learn about pair of adjacent angles.

Sum Up:

(3 min)

Sum up the lesson by re-telling students about the adjacent angles that have common arm and common vertex by draw adjacent angles on the board.

Assessment:

(5 min)

Assess the students learning by asking to draw a pair of adjacent and non-adjacent angles in their notebook.

Homework:

(2 min)

Solve Q1 of "Learning check 7.2" given on page 129 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 1**

Unit Name: Geometry **Topic: Pairs of Angles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Describe adjacent, complementary and supplementary angles.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 128-130

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask them what is meant by adjacent angles? Take their responses and then call a student to the front of the class and ask him/her to draw a pair of adjacent angles. Ask the rest of the class to observe and tell if he/she draw a pair of adjacent angles. Appreciate him/her for their correct work.

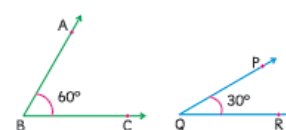
Main Activities/Concept Building:

(25 min)

Activity 1:

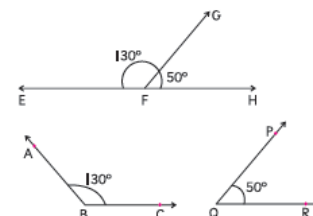
Tell students today we will learn about complementary and supplementary angles. Ask them: Do you know about these pairs of angles. Take their responses and appreciate if someone gives the right answer. Draw a pair of angle such that the sum of the pairs of angle is 90° . Tell them that when the pair of angle whose sum is 90° is called the complementary angles and each angle is the complement of the other angle. Instruct them to observe the angles, as the pair of angles has common vertex and common arm so it is a adjacent complementary angles.

Now draw another pair of angle and ask them to observe the angles their sum are 90° but this pair of angle is not an adjacent complementary angle.



Activity 2:

Draw a pair of angle such that the sum of the pairs of angle is 180° . Tell them that when the pair of angle whose sum is 180° is called the supplementary angles and each angle is the supplement of the other angle. Instruct them to observe the angles, as the pair of angles has common vertex and common arm so it is a adjacent supplementary angles. Now draw another pair of angle and ask them to observe the angles their sum are 180° but this pair of angle is not an adjacent supplementary angle. Ask them to open their textbook page 128 and 129 and learn about supplementary and complementary angles.



Sum Up:

(3 min)

Sum up the lesson by re-telling students about complementary and supplementary angles and notable notes given at page 128 and 129 of their textbooks.

Assessment:

(5 min)

To assess the students learning ask them to solve the Quick checks given at page 128 and 129 of their textbook in their notebooks.

Homework:

(2 min)

Solve Q2, Q3, Q4 and Q5 of "Learning Check 7.2" given on page 130 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 2**

Unit Name: Geometry **Topic: Triangles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Identify and describe triangles with respect to their sides. (Isosceles, equilateral, and scalene).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 130, 131 and 133, Flash cards of triangles with respect to their sides

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask them: Do you know about triangle and its sides? Take their responses and tell them that a triangle that has three sides and three vertices. Ask them to tell the names of objects that are of triangle shape. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about triangles with respect to their sides. Ask them: Do you know about the types of the triangle with respect to their sides. Appreciate if someone gives the correct answer. Now show a flash card of triangle that 3 equal sides and tell them that a triangle that has three equal sides are called equilateral triangle. Now show a flash card of a triangle that has two equal sides and tell them that if a triangle has two equal sides then that triangle is called isosceles triangle. Now show a flash card of a triangle that has three sides of different lengths and tell them that if a triangle has three sides of different length then that triangle is called scalene triangle.

Activity 2:

Make three groups of student. Give each group some flash cards of triangles. Instruct first group to separate out the equilateral triangle, second group to separate out the isosceles and the third group to separate out scalene triangle. Roam around the class and observe their working. Instruct them to come one by one to the front of the class and ask them to present their work to the whole class. Ask them to open their textbook page 130 and 131 and learn about the types of triangles with respect to their sides.

Sum Up: (3 min)

Sum up the lesson by re-telling students about triangles and types of triangles with respect to their sides also tell them that the symbol that is used for triangle is “ Δ ”.

Assessment: (5 min)

To assess the students, ask them to solve Q1 of “Learning Check 7.3” at page 133 of their textbooks.

Homework: (2 min)

Solve Q3 of “Learning Check 7.3” at pages 133 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 3**

Unit Name: Geometry **Topic: Triangles** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Identify and describe triangles with respect to their angles. (Acute angled triangle, Obtuse angled triangle and right-angled triangles).

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 132 and 133, Flash cards of triangles with respect to their angles

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework. Ask students: tell the names of types of triangles with respect to their sides. Also tell the properties of each triangle on the basis of which they are different from each other.

Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(25 min)

Activity 1:

Tell students today we will learn about triangles with respect to their angles. Ask them: Do you know about the types of the triangle with respect to their angles. Appreciate if someone gives the correct answer. Now show a flash card of triangle that 3 equal angles and tell them that a triangle that has three acute angles are called acute angled-triangles triangle. Now show a flash card of a triangle that has two equal angles and tell them that if a triangle has one angle is of 90° then that triangle is called right-angled triangle. Now show a flash card of a triangle that has one angle greater than 90° or obtuse angle is called obtuse-angled triangle

Activity 2:

Make three groups of student. Give each group some flash cards of triangles. Instruct first group to separate out the right-angled triangle, second group to separate out the acute-angled triangle and the third group to separate out obtuse-angled triangle. Roam around the class and observe their working. Instruct them to come one by one to the front of the class and ask them to present their work to the whole class. Ask them to open their textbook page 132 and learn about the types of triangles with respect to their angles.

Sum Up:

(3 min)

Sum up the lesson by re-telling students about triangles and types of triangles with respect to their angles also discuss with them the notable Note with them.

Assessment:

(5 min)

To assess the students, ask them to solve Q2 of "Learning Check 7.3" at page 133 of their textbooks. Also solve the Quick check given at page 132 of their textbook.

Homework:

(2 min)

Solve Q4 of "Learning Check 7.3" at pages 133 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 4**

Unit Name: Geometry **Topic: Construction of Triangles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct a triangle when two angles and their included side is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 134, 135 and 136

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework. Ask students: What is the difference between acute-angled triangle and obtuse-angled triangle? Ask them to tell the names of the triangles with respect to sides and their angles.

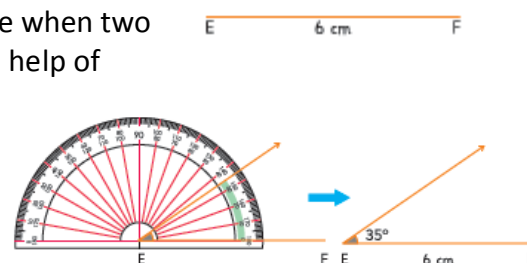
Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 min)

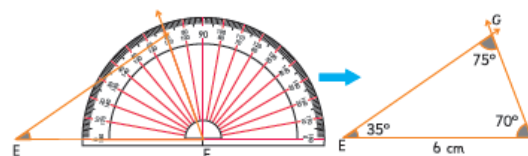
Activity 1:

Tell students today we will learn about the construction of a triangle when two angles and one side is given. Take the board geometry and with the help of ruler draw a line segment of 6 cm and name it as EF. Now place the protractor at point E such that its baseline is from E to F. Now draw an angle of 35° at point E. Now place the protractor on point F and draw and 70° . remove the protractor and join both the rays at point G. ask students to open their textbook to page 134, 135 and observe the steps to draw a triangle when two angles and one side is given.



Activity 2:

Make two groups of students and ask them to draw a triangle when two angles and one side is given. Give them flash cards of angles and side to students and ask them to follow the steps construct the triangle by using these angles and sides. Appreciate them for their good work.



Sum Up:

(3 min)

Sum up the lesson by explaining students the steps to draw a triangle whose two angles and one side is given with the help of protractor and ruler.

Assessment:

(8 min)

To assess the students learning, ask them to solve Q1 of "Learning Check 7.4" given at pages 136 of their textbooks.

Homework:

(2 min)

Solve Q2 of "Learning Check 7.4" at page 136 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 5**

Unit Name: Geometry **Topic: Construction of Triangles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct a triangle when two angles and their included side is given.

Resource Material:

Chalk/Marker, White/Blackboard, Chalk/Marker, White/Blackboard, Board geometry box, worksheets, Flash cards of two angles and one sides

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework. Ask students to tell how we can construct the triangle? Ask them to tell the steps of construction of triangle. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (22 min)

Activity 1:

Put flash cards on which two angles and one side is written. Ask students to come one by one to the front of the class and ask them to select one card and then with the help of protractor and ruler draw triangle of that measure. Instruct them to write the steps of construction of triangle. Roam around and observe their working. Ask them to raise hand when finished. Now call one by one each student to front of the class and present their work to the whole class. Ask the rest of the class to check and correct if needed. Appreciate the student who done accurate working.

Activity 2:

Give them worksheet 1 and ask them to complete the given worksheet 1 by following instructions. Roam around the class and check their work. Also discuss with them about their common mistakes. Appreciate them for their correct work.

Sum Up: (3 min)

Sum up the lesson by retelling students about the steps to draw a triangle when two angles and their respected side is given.

Assessment: (8 min)

To assess the students learning, ask them draw a triangle of angle 30 and 45 and the side is of 4.9 cm.

Homework: (2 min)

Solve the worksheet 2.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet 1

Name: _____

Date: _____

1. Draw a triangle whose one side is of 5.5 cm and angle of 45° and 55° . Also write the steps of construction.

2. Draw a triangle whose one side is of 7.9 cm and angle of 75° and 30° . Also write the steps of construction.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet 2

Name: _____

Date: _____

1. Draw a triangle whose one side is of 6.8 cm and angle of 105° and 25° . Also write the steps of construction.

2. Draw a triangle whose one side is of 9.2 cm and angle of 15° and 90° . Also write the steps of construction.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 6**

Unit Name: Geometry **Topic: Construction of Triangles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct a triangle when two sides and included angle is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 136, Board geometry

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: "How we can draw a triangle when one side and two angle is given. Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building:

(22 min)

Activity 1:

Tell students today we will learn about the construction of a triangle when two angles and one side is given. Take the board geometry and with the help of ruler draw a line segment of 4 cm and name it as AB. Now place the protractor at point B such that its baseline is from A to B. Now draw an angle of 30° at point B. Now with help of ruler draw 3 cm meter long line at point B. Remove the protractor and join both the rays at point C with A. This is the required triangle when two sides and one angle is given.

Activity 2:

Make two groups of students and ask them to draw a triangle when one angle and two sides are given. Give them flash cards of angles and side to students and ask them to follow the steps construct the triangle by using these angles and sides. Appreciate them for their good work.

Sum Up:

(3 min)

Sum up the lesson by explaining students the steps to draw a triangle whose two sides and one angle is given with the help of protractor and ruler.

Assessment:

(8 min)

To assess the students learning, ask them to solve Q3 of "Learning Check 7.4" given at pages 136 of their textbooks.

Homework:

(2 min)

Solve Q4 of "Learning Check 7.4" at page 136 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 2** **Lesson Plan: 7**

Unit Name: Geometry **Topic: Construction of Triangles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct a triangle when two sides and included angle is given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 135 and 136, Board Geometry, worksheets, flash card of one angle and two sides

Teaching & Learning Activities:

Opening Activities/Warm-up: (3 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework. Call a student to the front of the class and ask him/her to tell the steps of construction of triangle with the help of protractor and ruler. Take his/her response and appreciate if he/she tell the correct steps of construction.

Main Activities/Concept Building: (22 min)

Activity 1:

Put flash cards on which two sides and one angle is written. Ask students to come one by one to the front of the class and ask them to select one card and then with the help of protractor and ruler draw triangle of that measure. Instruct them to write the steps of construction of triangle. Roam around and observe their working. Ask them to raise hand when finished. Now call one by one each student to front of the class and present their work to the whole class. Ask the rest of the class to check and correct if needed. Appreciate the student who done accurate working.

Ask students to open their textbook page 135 and 136 and discuss with them about their common mistakes.

Activity 2:

Give them worksheet 1 and ask them to complete the given worksheet 1 by following instructions. Roam around the class and check their work. Also discuss with them about their common mistakes. Appreciate them for their correct work.

Sum Up: (3 min)

Sum up the lesson by retelling students about the steps to draw a triangle when one angle and two sides are given.

Assessment: (8 min)

To assess the students learning, ask them draw a triangle of angle 90° and the sides are of 7.1 cm and 4.4 cm.

Homework: (2 min)

Solve the worksheet 2.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet 1

Name: _____

Date: _____

1. Draw a triangle DEF whose length of two sides are $DE = 8\text{ cm}$ and $EF = 4.9\text{ cm}$ and one angle of 90° . Also write the steps of construction.

2. Draw a triangle ABC whose length of two sides are $AB = 6\text{ cm}$ and $AC = 5.5\text{ cm}$ and one angle of 45° . Also write the steps of construction.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet 2

Name: _____

Date: _____

1. Draw a triangle XYZ whose length of two sides are $YZ = 4.5$ cm and $ZX = 7.2$ cm and one angle of 120° . Also write the steps of construction.

3. Draw a triangle HIJ whose length of two sides are $HI = 3.7$ cm and $IJ = 9.2$ cm and one angle of 60° . Also write the steps of construction.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3

Periodic Unit: 1

Week: 3

Lesson Plan: 1

Unit Name: Geometry

Topic: Quadrilaterals

Date:

Objective(s):

At the end of this period, the students will be able to:

Recognise the kinds of quadrilateral (square, rectangle, parallelogram).

Identify and describe properties of quadrilaterals and classify those using parallel sides, equal sides, and equal angles.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 136-139, flash cards of square, rectangle and parallelogram

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students to tell the steps to draw a triangle. Take their responses and appreciate them for their correct answer. Ask them how many sides a triangle have. Take their responses and tell them that a triangle has three sides and three corner.

Main Activities/Concept Building:

(22 min)

Activity 1:

Tell students today we will learn about quadrilaterals. Ask the: Do you know about quadrilaterals? Take their responses and tell them that a quadrilateral has a closed figure that has four sides and four corner. Ask students: is the triangle has a quadrilateral? Take their responses and tell them that a triangle is not a quadrilateral because the triangle has three sides and three corner whereas the quadrilateral has four sides and four corners. Now show the flash cards of square, rectangle and parallelogram to students. tell them that a square four equal sides and four equal angle of 90° . A rectangle has two long and two short sides of equal length. All pairs of adjacent sides are perpendicular to each other and all angles are right angles. Point out towards the parallelogram and tell them that both pairs of sides are parallel to each other and opposite sides are equal in length. In parallelogram the both pairs of opposite angles are equal.

Activity 2:

Make three groups of students of the class. Instruct first group to draw a square and write about its properties and second group to draw a rectangle and write its properties. Third group draw a parallelogram and write about its properties. Roam around and check their work. Now call one by one group to the front of the class and ask them to show their working. Appreciate them for their good work. Ask students to open their textbook page 136 and 137 and learn about the quadrilaterals and its types square, rectangle and parallelogram.

Sum Up:

(3 min)

Sum up the lesson by retelling students the about quadrilaterals and explain notable note given at page 136 of their textbook.

Assessment:

(5 min)

To assess the students, ask some questions related to quadrilaterals:

How many sides are of a quadrilateral? Are all angles of square are equal? Are all sides of parallelogram are equal in length? Take their responses and appreciate them for their correct answer.

Homework:

(2 min)

Solve Q1(a, b, c) of "Learning check 7.5" given at page 138 and 139 of their textbook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 2**

Unit Name: Geometry **Topic: Quadrilaterals** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recognise the kinds of quadrilateral (rhombus, trapezium, and kite).

Identify and describe properties of quadrilaterals and classify those using parallel sides, equal sides and equal angles.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 136-139, flash cards of quadrilaterals

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Show flash cards of square, rectangle and parallelogram to students and ask them to tell about the properties of each of these. Take their responses and appreciate for their correct answer.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about quadrilaterals and its types. Now show the flash cards of rhombus, kite and trapezium to students. Point out towards the rhombus and tell them that both pairs of opposite sides are parallel to each other. All sides are equal in length and sum of pairs of angle between any two parallel sides equal to 180° . Now point out towards the kite and tell them that a both pairs of distinct adjacent sides are equal in length and only one pair of opposite angles are equal. Tell them that by pointing trapezium that in this quadrilateral only one pair of opposites sides are parallel and no side are equal in length.

Activity 2:

Make three groups of students of the class. Instruct first group to draw a rhombus and write about its properties and second group to draw a kite and write its properties. Third group draw a trapezium and write about its properties. Roam around and check their work. Now call one by one group to the front of the class and ask them to show their working. Appreciate them for their good work. Ask students to open their textbook page 137 and 138 and learn about the quadrilaterals and its types rhombus, trapezium and kite.

Sum Up: (3 min)

Sum up the lesson by retelling students the about kite, rhombus and trapezium and their properties by draw and pointing towards each.

Assessment: (5 min)

To assess the students, ask some questions related to quadrilaterals:

Is rhombus is the quadrilateral? How many pairs of sides are parallel in trapezium? Are all sides of kite are equal in length? Take their responses and appreciate them for their correct answer.

Homework: (2 min)

Solve Q1(d, e, f) of "Learning check 7.5" given at page 139 of their textbook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 3**

Unit Name: Geometry **Topic: Construction of Squares** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct square when lengths of sides are given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 140 and 142, protractor and ruler

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

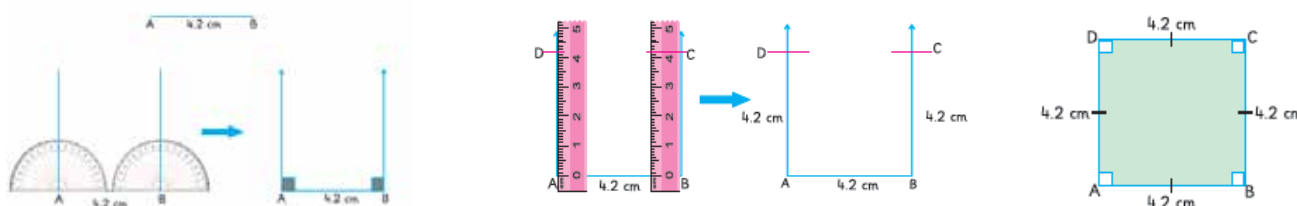
Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Paste the wallchart of the quadrilaterals to the front of the class and call one by one random students to the front of the class and ask them to tell the name and properties of these quadrilaterals. Appreciate them for their correct answers.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn how to draw a square with the help of protractor and ruler. Tell them that first we draw a line segment of 4.2 cm. then with the help of protractor draw angles of 90° at Point A and B. As the square has all sides of equal length. So mark the point C and D with the help of ruler such that BC and AD = 4.2 cm. now remove the ruler and join D to C. this the required square of length 4.2 cm.



Activity 2:

Ask students to draw a square with the help of protractor and ruler in their notebooks. Roam around the class, check their work and guide them where needed. Now call one by one each students to the front of the class and instruct them to show their working to the whole class. Appreciate them for their good work and active participating in class. Ask students to open their textbook page 140 and learn the step to draw a square with the help of protractor.

Sum Up: (3 min)

Sum up the lesson by retelling students about the steps to draw a square by drawing square on the board.

Assessment: (8 min)

To assess the students learning, ask them to draw a square of 5.5 cm in their notebook and also write the steps of construction.

Homework: (2 min)

Solve Q1 of “Learning Check 7.6” on page 142 of their textbooks in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 4**

Unit Name: Geometry **Topic: Construction of Rectangles** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Use protractor and ruler to construct rectangle when lengths of sides are given.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 141 and 142, Protractor and ruler

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

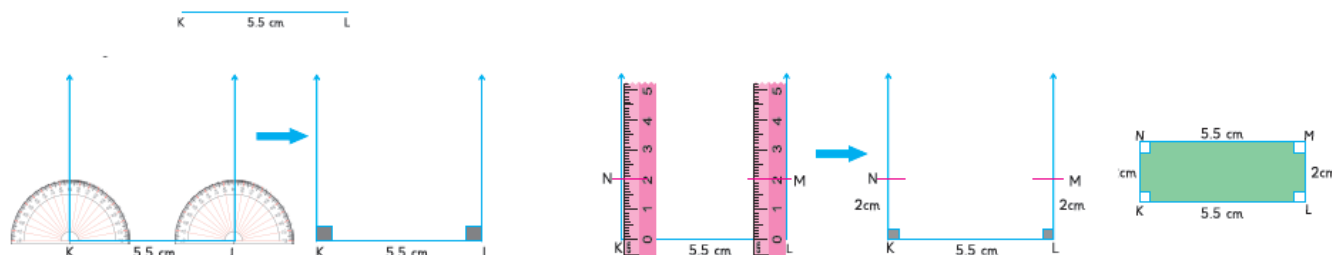
Ask students about their homework. Ask students to tell how we can draw a square with the help of protractor and ruler. Ask them to tell the steps to draw a square. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn how to draw a rectangle with the help of protractor and ruler. Tell them that first we draw a line segment of 5.5 cm. Then with the help of protractor draw angles of 90° at Point K and L. As the rectangle has opposite sides are equal in length. So mark the point N and M with the help of ruler such that LM and KN = 2 cm. now remove the ruler and join M to N. this the required rectangle of length 5.5 and width of 2 cm.

Activity 2:



Ask students to draw a rectangle with the help of protractor and ruler in their notebooks. Roam around the class, check their work and guide them where needed. Now call one by one each students to the front of the class and instruct them to show their working to the whole class. Appreciate them for their good work and active participating in class. Ask students to open their textbook page 141 and learn the step to draw a rectangle with the help of protractor.

Sum Up: (3 min)

Sum up the lesson by retelling students about the steps to draw a rectangle by drawing rectangle on the board.

Assessment: (8 min)

To assess the students learning, ask them to Solve Q2(a, b) of “Learning Check 7.6” on page 142 of their textbooks in their notebook.

Homework: (2 min)

Solve Q2(c-g) of “Learning Check 7.6” on page 142 of their textbooks in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 5**

Unit Name: Geometry **Topic: Symmetry and its types** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recognise reflective symmetry in 2-D figures.

Identify lines of symmetry for given 2-D figures

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 145

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: how we can draw a square and rectangle with the help of protractor and ruler. Take their responses and appreciate them for their correct answer. Now tell them that today will learn about symmetry. Ask them do you know about symmetry. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (22 min)

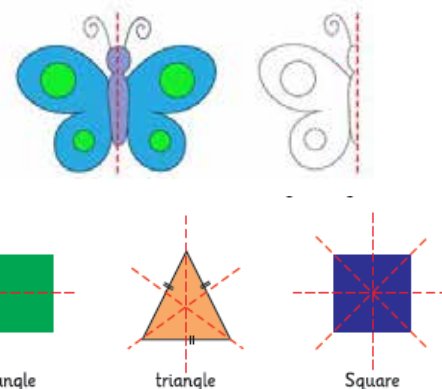
Activity 1:

Tell them that today they are going to learn about symmetric figures.

Draw a butterfly on the paper. Ask the students to look at the butterfly.

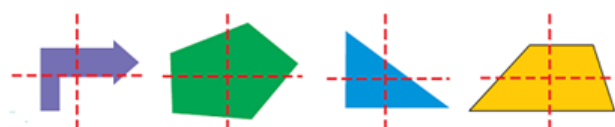
When it folds its wings, we can see that both sides match. Explain to the students that lines of symmetry divide each figure into equal halves. Explain to the students that the butterfly shows line a symmetry. The line of symmetry is vertical.

Draw a square, rectangle and triangle on the board and draw different line of symmetry and explain to them that a shape have more than one lines of symmetry.



Activity 2:

Now ask the students to look at the following figures and the dotted line. Explain to them that we can see that these lines are not dividing the shapes into equal halves. So, there is no line of symmetry and the figures are not symmetric. Similarly explain the students that the following figures are not symmetric and have no line of symmetry.



Sum Up: (3 min)

Sum up the lesson by repeating the retelling students about symmetric figures and non-symmetric figures by giving different examples. Tell them that a figure has more than one line of symmetry.

Assessment: (5 min)

To assess students learning, write some English alphabets on the board and ask them to write that letters in their notebook and the draw a line of symmetry and tell which one shows the reflective symmetry.

Homework: (2 min)

Solve Q1 of "Learning Check 7.7" given at page 145 of their textbook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 3** **Lesson Plan: 6**

Unit Name: Geometry **Topic: Symmetry and its types** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recognise reflective symmetry in 2-D figures.

Identify lines of symmetry for given 2-D figures.

Resource Material:

Chalk/Marker, White/Blackboard, Wallchart of alphabets that show symmetry, worksheet, Textbook page 142 and 143

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Draw some symmetric and non-symmetric shapes on the board and ask them to tell which shapes are symmetric and which is not. Take their responses and appreciate them for their correct response.

Main Activities/Concept Building:

(25 min)

Activity 1:

Tell them that today they are going to learn how to draw a line of symmetry. Paste the wallchart of some alphabets on the board. Ask the students to look at the letters of the alphabet given that are symmetric along the vertical line. Now explain to them that the given letters below are symmetric along the horizontal line. Explain them that the given letters below have both horizontal as well as vertical lines of symmetry. Also explain that the letters that are not symmetric. Explain to the students that there are many symmetric figures and objects around us.



Activity 2:

Show flash cards of some shapes like alphabet, rose, geometry shapes etc. Ask the students that which flashcards are symmetric along the vertical line and which flashcards are symmetric along the horizontal line? Appreciate if anyone gives the right answer. Now draw the lines and explain to the students that which pictures are symmetric along the vertical line and which pictures are symmetric along the horizontal line. Ask students to open their textbook page 142 and 143 and learn about symmetry and its types.

Sum Up:

(3 min)

Sum up the lesson by re-telling students that letters have also line of symmetry that divides them into equal halves such that they look like mirror of each other.

Assessment:

(5 min)

To assess students learning, ask them to write numbers that have reflective symmetry. Take their responses and appreciate them for their correct response.

Homework:

(2 min)

Solve the given worksheet.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

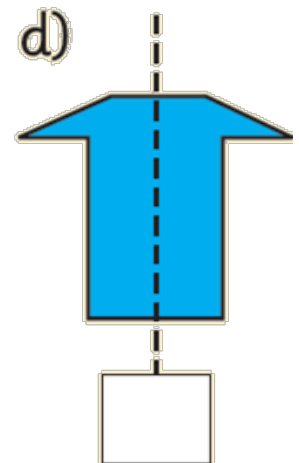
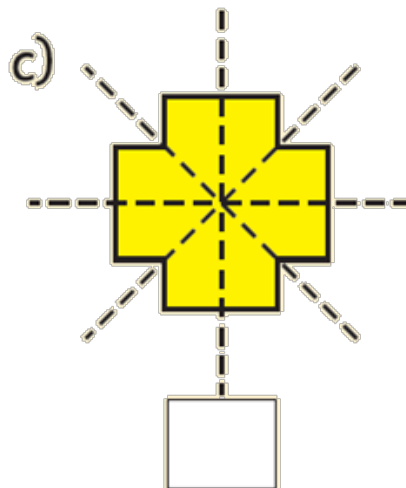
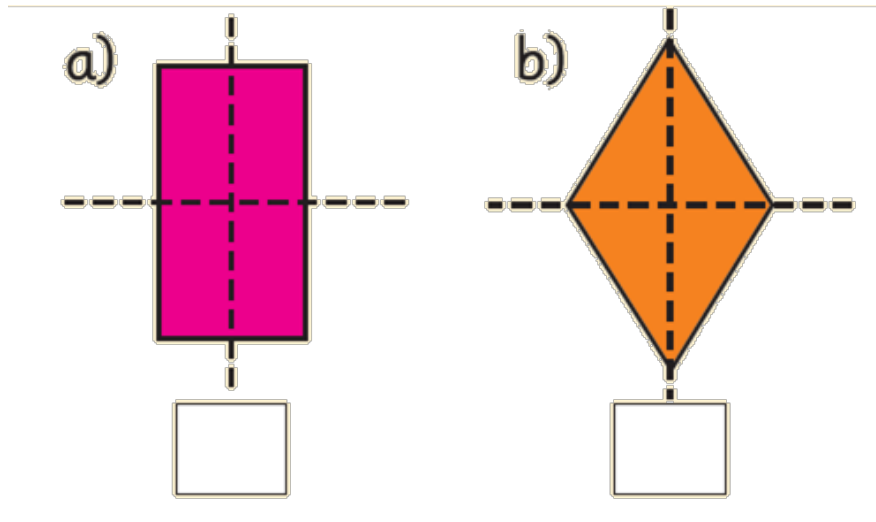
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

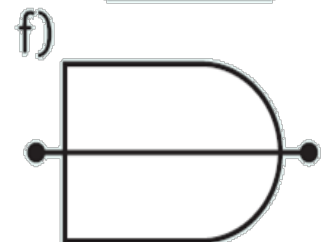
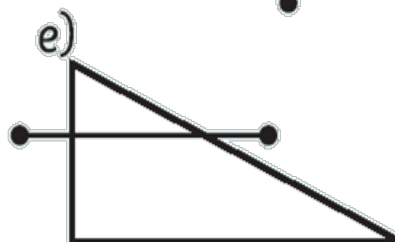
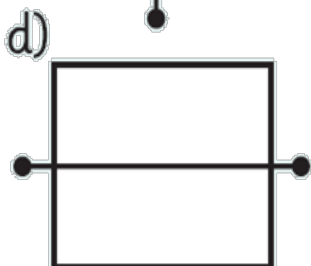
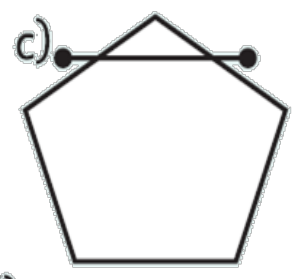
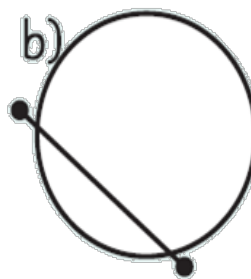
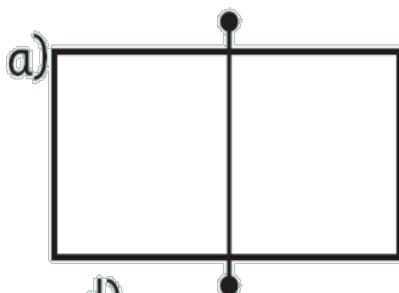
Name: _____

Date: _____

1. Count and write the number of lines of symmetry for the following.



2. Identify and colour the symmetrical shapes.



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3

Periodic Unit: 1

Week: 3

Lesson Plan: 7

Unit Name: Geometry

Topic: Symmetry and its types

Date:

Objective(s):

At the end of this period, the students will be able to:

Recognise rotational symmetry in 2-D figures.

Find point of rotation and order of rotational symmetry of given 2-D figures.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 144 and 146

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

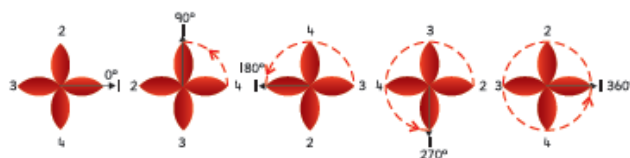
Ask students about their homework. Ask students what is reflective symmetry. Take their responses and ask them to draw two shapes that shows reflective symmetry and two that is not a symmetry. Take their responses and appreciate them for their correct work.

Main Activities/Concept Building:

(25min)

Activity 1:

Tell students today we will learn about rotational symmetry. Ask them: Do you know about rotational symmetry. Take their responses and tell them that a figure turned or rotated about the centre, it looks exactly the same four time after every quarter turns. Now draw a symmetrical shape on the board and write 0,1,2, 3 with each petal of flower. Now turn it quarter(90°) and observe the shape its look like same as original. Now turn it to second quarter (180°) and look it again look same and when we turn it to the third quarter(270°) it again looks like the same as the original and then turn again fourth quarter its looks same. Tell them that as its exactly look same four times after every quarter then it is called the rotational symmetry of order 4. Tell them that a shape is has rotational symmetry if its look exactly same as original at least two times during the complete turn.



Activity 2:

Ask students to work in pairs and draw a figure in their notebook and then rotate it quarterly four time and observe it if its look same two time in full rotation of 360° then it is called the rotational symmetry. Roam around the class, check their work and guide if needed. Appreciate them for their correct response.

Sum Up:

(3 min)

Sum up the lesson by explaining to students about rotational symmetry. Ask students to open their textbook to page 144 and solve the example 1 in their notebook and find the order of rotation.

Assessment:

(5 min)

To assess the students, ask them What is meant by rotational symmetry? How many time a figure look like in full rotation? Take their responses and appreciate them for their correct response.

Homework:

(2 min)

Solve Q2(a, b, c) of "Learning Check 7.7" given at page 146 of their textbook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 1**

Unit Name: Geometry **Topic: Symmetry and its types** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recognise rotational symmetry in 2-D figures.

Find point of rotation and order of rotational symmetry of given 2-D figures.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 144-146

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them to tell what is the difference between the reflective and rotational symmetry? Take their responses and tell them that in reflective symmetry a line that divides the shape and after division the both halves of the shapes look like the same. But in rotational symmetry an object moves around its centre point and looks like same as original at least two time then that objects have rotational symmetry.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about the rotational symmetry. Call a student to the front of the class and ask them to draw a star on the board and then turn quarterly and find its order of rotational symmetry. Ask the rest of the class to check and tell if he/she doing correctly. Appreciate them for their correct response. Now call another students and ask them to draw a square and then find is it has a rotational symmetry and if have then find the order of rotational symmetry. Repeat this activity to some other students and appreciate them for their correct working.



Activity 2:

Ask students to open their textbook page 144 and 145. Instruct them to solve the example 2 and example 3 in their notebook and tell the order of rotation of the given shapes. Roam around the class, check their work and guide them if needed. Appreciate them for their good work. Discuss with them about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining to students about rotational symmetry and explain the notable note given at page 144 of their textbook.

Assessment: (5 min)

To assess the students, ask them to solve the “Quick Check” given at page 145 of their textbook in their notebook.

Homework: (2 min)

Solve Q2(d, e, f) of “Learning Check 7.7” given at page 146 of their textbook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 2**

Unit Name: Geometry **Topic: Nets of 3-D Shapes** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Identify cubes, from their nets.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 146, 147 and 148, wallchart of cube shaped objects, cube shaped boxes

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

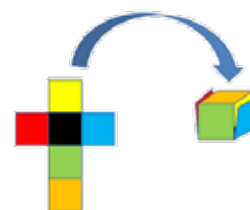
Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: Do you know about square? How many side a square has? What is cube and cube shaped objects? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about nets of cube shape. Ask students: Do you know about cube shaped objects. Take their responses and appreciate them if someone gives the right answer. Draw cube shape on the board and point out towards its edges and tell them that when the square faces of a cube are unfolded from the edges and laid out flat they make a 2-D figure. That 2-D figure is called the net of the cube. Now place a cube box on the table and start to unfold it from the edges and then show the when unfold it its look like 2-D shape and this is the net of the 2-D shape. Tell them that a cube has 11 types of nets.



Activity 2:

Make four groups of students and give each student a cube shape box. Ask them to unfold the box and find the net the box. Instruct each group to start unfold by using different ways. Roam around the class and check their work and guide them if needed. Appreciate them for their correct answer. Appreciate them for their correct response. Ask them to open their textbook page 146 and 147 and learn about the nets of the cube in different ways.

Sum Up: (3 min)

Sum up the lesson by explaining to about the nets of the cube shape by draw a cube and then show the unfolded form of that cube in different forms.

Assessment: (5 min)

To assess the students, ask them to solve the "Quick check" given at page 147 of their textbook.

Homework: (2 min)

Solve Q2(a) of "Learning Check 7.8" on pages 148 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 3**

Unit Name: Geometry

Topic: Nets of 3-D Shapes

Date:

Objective(s):

At the end of this period, the students will be able to:

Identify cuboids from their nets.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 147, 148 and 149, wallchart of cuboid shaped objects, cuboid shaped boxes

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

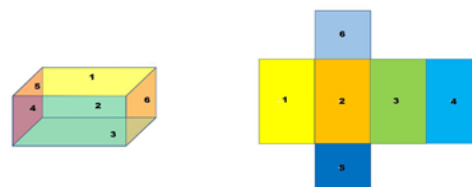
Ask students about their homework. Ask students: Do you know about rectangle? How many side a rectangle has? What is cuboid and cuboid shaped objects? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building:

(25 min)

Activity 1:

Tell students today we will learn about nets of cuboid shape. Ask students: Do you know about cuboid shaped objects. Take their responses and appreciate them if someone gives the right answer. Draw cuboid shape on the board and point out towards its edges and tell them that when the rectangular faces of a cuboid are unfolded from the edges and laid out flat they make a 2-D figure. That 2-D figure is called the net of the cuboid. Now place a cuboid box on the table and start to unfold it from the edges and then show them the fully unfolded 2-D shape and tell them that it its look like 2-D shape and this is the net of the 2-D shape. Tell them that a cuboid has 11 types of nets.



Activity 2:

Make four groups of students and give each student a cuboid shape box. Ask them to unfold the box and find the net the box. Instruct each group to start unfold by using different ways. Roam around the class and check their work and guide them if needed. Appreciate them for their correct answer. Appreciate them for their correct response. Ask them to open their textbook page 147 and learn about the nets of the cuboid in different ways.

Sum Up:

(3 min)

Sum up the lesson by explaining to about the nets of the cuboid shape by drawing a cuboid and then show the unfolded form of that cuboid in different forms.

Assessment:

(5 min)

To assess the students, ask them to draw a cuboid shape in their notebook and then draw its different types of nets.

Homework:

(2 min)

Solve Q2(d) of "Learning Check 7.8" on pages 149 of their textbooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 4**

Unit Name: Geometry **Topic: Nets of 3-D Shapes** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Identify pyramids from their nets.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 147, 148 and 149, wallchart of pyramid shaped objects, pyramid shaped boxes

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

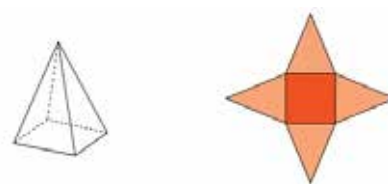
Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: Do you know about square and triangle? How many side a square and triangle has? What is pyramid and pyramid shaped objects? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about nets of pyramid shape. Ask students: Do you know about pyramid shaped objects. Take their responses and appreciate them if someone gives the right answer. Draw pyramid shape on the board and point out towards its edges and tell them that when the faces of a pyramid are unfolded from the edges and laid out flat they make a 2-D figure. That 2-D figure is called the net of the pyramid. Tell them that a pyramid has one square and four triangle shapes. Now place a pyramid shape object on the table and start to unfold it from the edges and then show the when unfold it its look like 2-D shape and this is the net of the 2-D shape.



Activity 2:

Make four groups of students and give each student a pyramid shape box. Ask them to unfold the box and find the net the box. Instruct each group to start unfold by using different ways. Roam around the class and check their work and guide them if needed. Appreciate them for their correct answer. Appreciate them for their correct response. Ask them to open their textbook page 146 and 147 and learn about the nets of the pyramid in different ways.

Sum Up: (3 min)

Sum up the lesson by explaining to about the nets of the pyramid shape by draw a pyramid and then show the unfolded form of that pyramid in different forms.

Assessment: (5 min)

To assess the students, ask them to draw a pyramid shape in their notebook and then draw different types of nets.

Homework: (2 min)

Solve Q2(b, c) and Q3 of “Learning Check 7.8” on pages 148 and 149 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 5**

Unit Name: Geometry **Topic: Nets of 3-D Shapes** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Describe and make 3-D objects (cubes, cuboids, pyramids).

Resource Material:

Chalk/Marker, White/Blackboard, 3-D object, flash cards of cube, cuboid and pyramid

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them to tell some questions related to nets of cube, cuboid and pyramid: What is meant by net? How many types of nets a cube and cuboid has?

Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about 3-D shapes cube cuboid and pyramid. Paste a wallchart of cube, cuboid and pyramid shape objects on the board. Call a student to the front of the class and ask him/her to find out the objects in the chart paper that are of cube shape and circle it. Ask the whole to check and tell whether he/she circle the correct objects. Now call another student to the front of the class and ask him/her to circle the objects that are of cuboid shaped. Call another student to the front of the class and ask him/her to circle the objects that are of pyramid shape. Appreciate them for their correct response. Now ask them to find out the objects that are of cube and cuboid shaped. Ask them to make a list of objects and then share with each other. Appreciate them for their good work.

Sum Up: (3 min)

Sum up the lesson by re-telling students about 3-D shapes and tell them that how we can draw cube, cuboid and pyramid shape.

Assessment: (5 min)

To assess the students learning ask them to tell the names of 5 objects that are of 3-D shapes.

Homework: (2 min)

Solve Q1 of “Learning Check 7.8” on pages 148 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 6**

Unit Name: Geometry **Topic: Summary and Review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 150 and 151

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Geometry”.

Ask them the following to let them revise the basic concepts of geometry:

“What is the unit to measure angle?”

How can we draw angle using protractor? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 150 and 151 of their textbooks. Ask them to solve Q1, Q2 and Q3 of “Unit Check 7” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 150.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q4, Q5, Q6 and Q7 given at page 151 of their textbooks in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 4** **Lesson Plan: 7**

Unit Name: Geometry **Topic: Summary and Review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 150, 152 and 153

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Tell students that they are going to recall all the concepts of the Unit "Geometry".

Ask them the following to let them revise the basic concepts of geometry:

"What is quadrilaterals and types of it?"

How can we draw angle using protractor? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 152 and 153 of their textbooks. Ask them to solve Q8, Q9 and Q10 of "Unit Check 7" in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 150.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q11, Q12, Q13 and Q14 given at page 153 of their textbooks in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 1**

Unit Name: Geometry **Topic: Revision** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to angle.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

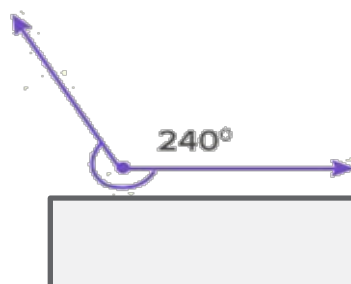
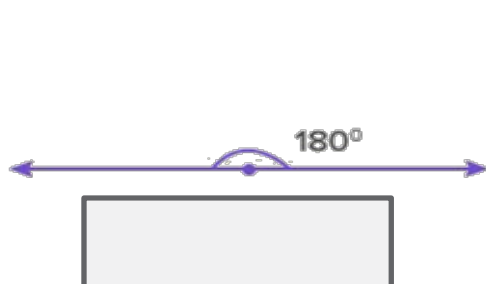
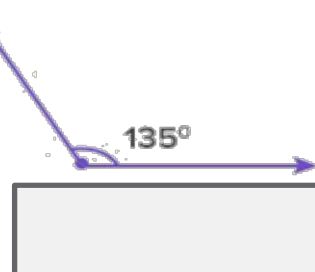
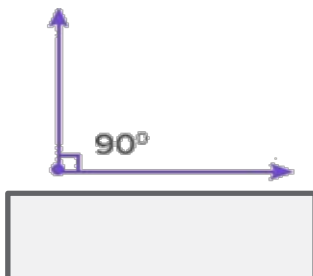
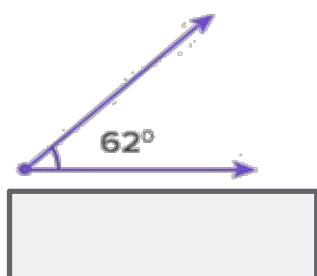
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

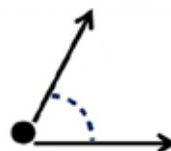
Date: _____

1. Write the names of the given angles.

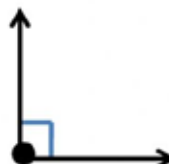


2. Match the angle with their correct name.

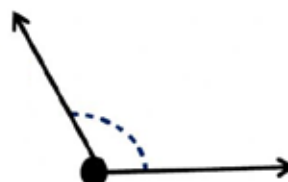
Right Angle



Obtuse Angle



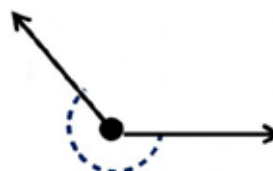
Acute Angle



Reflex angle



Straight angle



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 2**

Unit Name: Geometry

Topic: Revision

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to construction of angles and steps to construct the angle.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 min)

N/A

Homework:

(0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Construct angle of 90° .

2. Construct angle of 60° .

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 3**

Unit Name: Geometry **Topic: Revision** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to constructions of angles and pairs of angles..

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

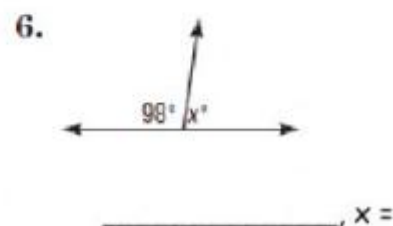
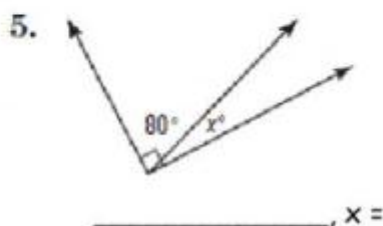
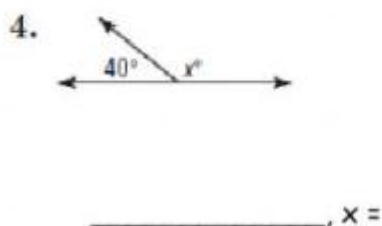
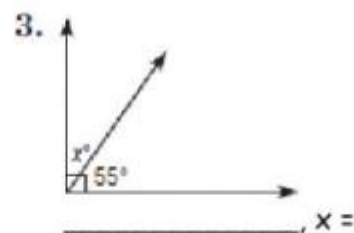
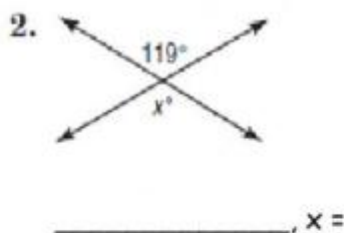
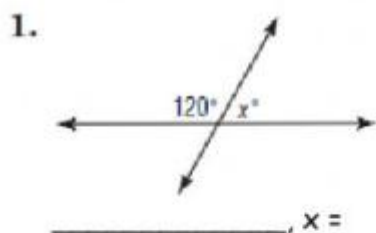
Worksheet

Name: _____

Date: _____

1. Construct reflex angle of 255° .

2. Write the name of pairs of angles.



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 4**

Unit Name: Geometry **Topic: Revision** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to construction of triangle.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

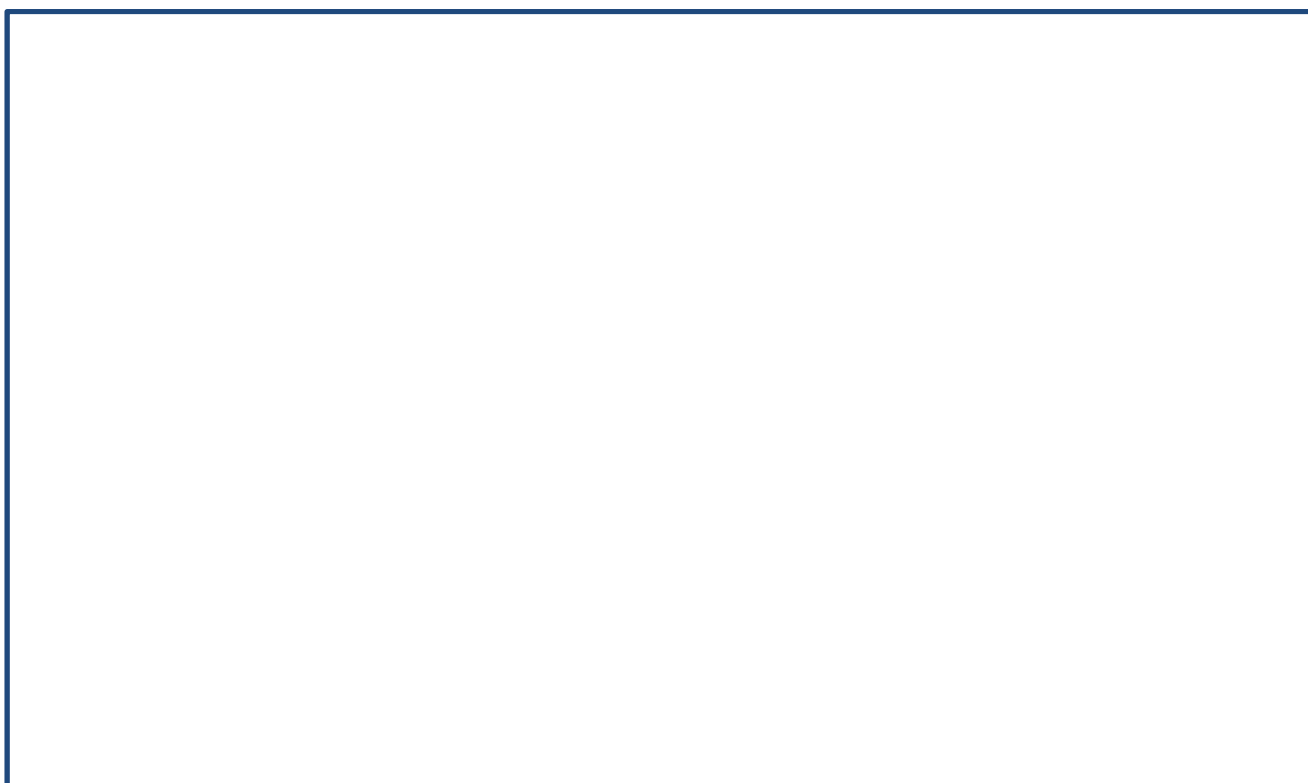
Name: _____

Date: _____

1. Construct a triangle ABC when $\angle ABC = 45^\circ$, $mAB = 5$ cm and $mBC = 4$ cm



2. Construct a triangle GHI when $\angle H = 65^\circ$, $mGH = 5.5$ cm and $mHI = 4.9$ cm



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 5**

Unit Name: Geometry **Topic: Revision** **Date: _____**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions construction of square and rectangle.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

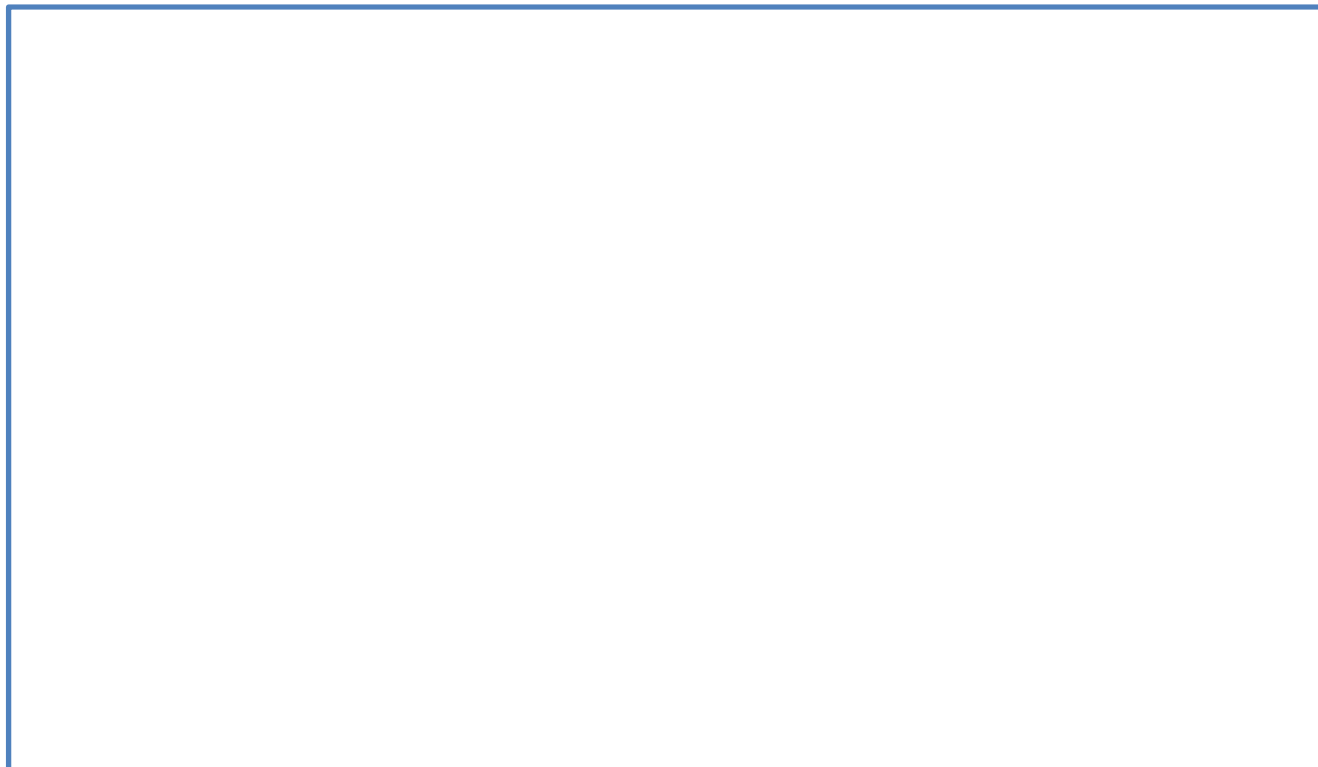
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

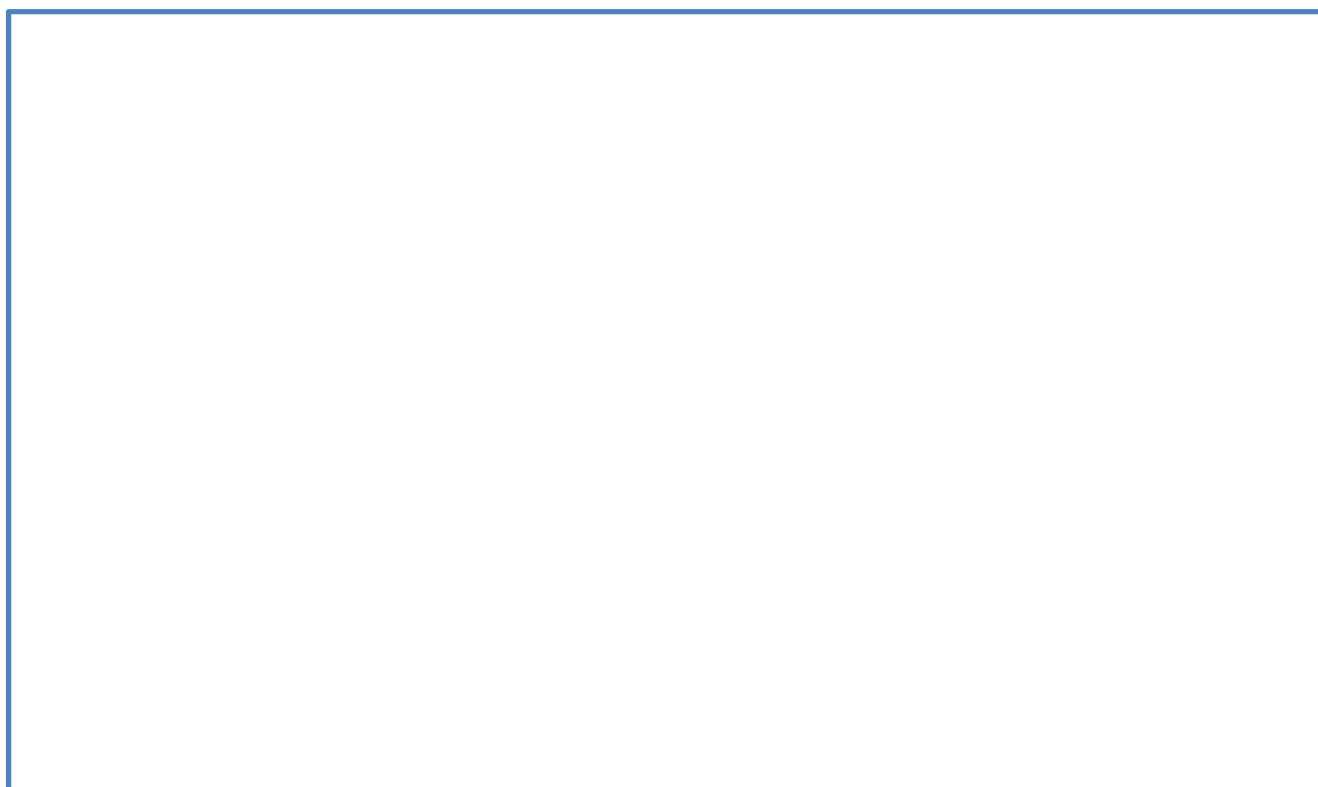
Name: _____

Date: _____

1. Draw a square of ABCD in which side $m\overline{AB} = 4$ cm



2. Draw a square of ABCD in which side $m\overline{AB} = 4$ cm



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 6**

Unit Name: Geometry **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to symmetry and about the order of symmetry.

Show flash cards of different shapes to them and ask them to tell which shapes have rotational symmetry and also tell the order of the rotational symmetry.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

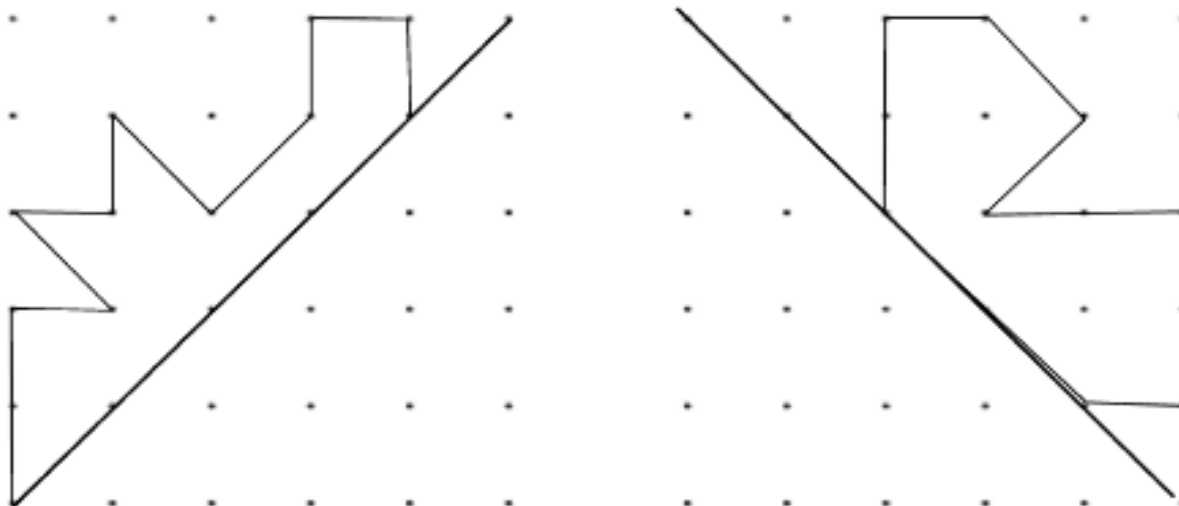
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

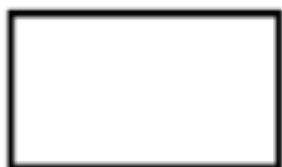
Date: _____

1. Complete the following reflective symmetry figures.



2. Observe the shapes and write the order of symmetry of these shapes.

(a)



(b)



(c)



(d)



(e)



(f)



(g)



(h)



(i)



Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 1** **Week: 5** **Lesson Plan: 7**

Unit Name: Fraction **Topic:** Revision **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Geometry”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask few questions related to 3-d shapes and their nets.

Tell them that we get net of any figure by opening it. A net of cube, cuboid and pyramid shapes can be get in many ways.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

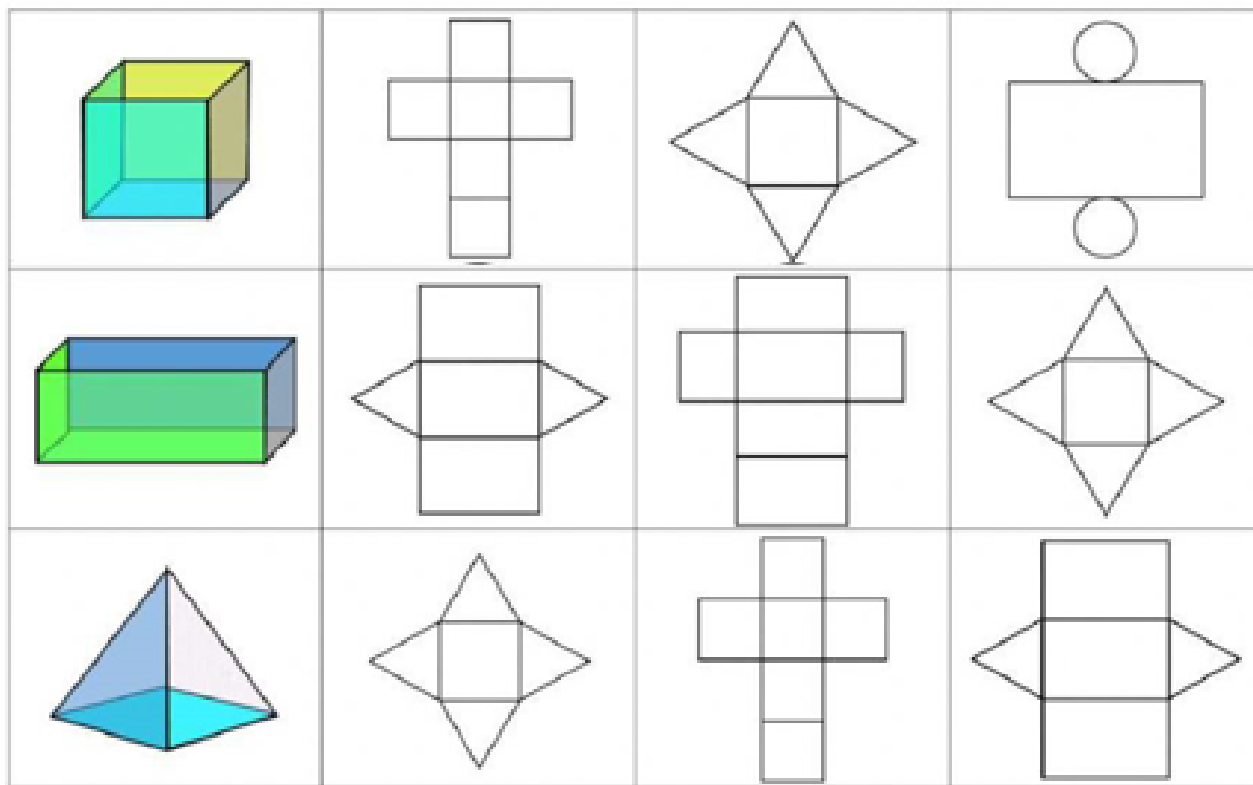
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Colour the correct net of the given shapes.



2. Draw nets of cube, cuboid and pyramid.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

3. There is 540 ml of water in one glass and 210 ml of water in another glass. What is the capacity both glasses?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 1**

Unit Name: Perimeter and area **Topic: Region of the closed figure** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Differentiate between perimeter and area of a square and rectangular region.

Identify the units for measurement of perimeter and area.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 155

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students today we will learn about perimeter and area of square and rectangle. Ask them: Do you know What is perimeter of square and rectangle? What is meant by area of square and rectangle? Take their responses and appreciate if someone gives the right answer.

Main Activities/Concept Building: (25 min)

Activity:

Tell students today we will learn about the region of the closed figures. Ask them Do you know about the closed region. Take their responses and appreciate if someone gives the right answer. Now point out towards the board of the class and ask them to tell what is the shape of the board. Take their responses and tell them that board is of rectangle shape. Point out towards the corners of the board and tell them that it is a closed figure as it has starting and ending point are same. Ask students to observe the objects of the classroom and tell whose objects are closed figures. Take their responses and appreciate them for their correct responses.

Now ask them to open their textbook page 155 and instruct them to observe the door and the clock these are the examples of the closed figures. Draw different shapes on the board and point out its boundary and the interior part and tell them that the boundary and the interior part together make the region of the closed figure.

Sum Up: (3 min)

Sum up the lesson by retelling students about the region of the closed figures by drawing different closed figures on the board.

Assessment: (5 min)

To assess the students, ask them to make a list of objects that have closed region.

Homework: (2 min)

Revise the classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 2**

Unit Name: Perimeter and area **Topic: Perimeter and area** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Differentiate between perimeter and area of a square and rectangular region.

Identify the units for measurement of perimeter and area.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 156, Big flash card of window

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Draw some open and closed figures on the board and ask students to point out the shapes that are closed. Take their responses and appreciate them for their correct response.

Ask them what is meant by region of the closed figures. Instruct them to draw some shapes in their notebook and then show its region.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will learn about difference between perimeter and area. Ask students: Do you know about perimeter and area. Take their responses and paste a big flash card of window on the board. Instruct them to observe the window it has same starting and ending point so it is closed figure. Point out the boundary of the window and tell them the boundary of the window is the perimeter and now point out the region inside the boundary and tell them that this is the area of the closed figure. Now draw a rectangle and a square on the board and tell them that the sum of all sides of the square and rectangle is the perimeter of the given figures. Tell them that we can measure the perimeter of any figure in centimeter and meter.

Tell them that as the region enclosed by the boundary is the area of the shape. Tell them that we can measure the area of the closed figure in centimetre square or metre square.

Ask students to open their textbook page 156 and learn about the difference between the area and perimeter of the closed figure.

Sum Up: (3 min)

Sum up the lesson by retelling students about the difference between perimeter and area. And the units used for perimeter and area.

Assessment: (5 min)

To assess the students, ask them to draw different closed shapes in their notebooks and then point out its perimeter and area.

Homework: (2 min)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 3**

Unit Name: Perimeter and area **Topic: Perimeter of square** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find and apply formulas to find perimeter of a square region.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 157, 159 and 160, Flash cards of square of different length

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students: What is the difference between square and rectangle? Which unit is used to find the perimeter of shapes and which unit is used to find the area of the closed shape. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will find the perimeter of the square. Ask students: How we can find the perimeter of the square? Take their responses and appreciate them if someone gives the right answer. Now draw a square on the board and point out towards its sides and name it with capital letter “L”. tell them that as we know that the perimeter of any shape is the sum of the length of all its sides. Tell them that as the length of all sides of the square are equal in length so.

Perimeter of square = $L + L + L + L = 4L$

Now draw a square of length 5 cm on the board and find its perimeter step by step and explain each step to students.

Activity 2:

Make small groups of students and give each student three flash cards of different lengths of square. Instruct them to find the perimeter of these squares by using formula. Roam around the class, check their work and guide them if required. Instruct them to raise hand when finished. Now call one by one each group to the front of the class and ask them to show their working. Appreciate them for their good work and the group with accurate work is the winner. Ask students to open their textbook page 157 and learn about the perimeter of the square and solve the examples given in the textbook in their notebook.

Sum Up: (3 min)

Sum up the lesson by retelling students how we can find the perimeter of the square by using formula by solving different examples on the board.

Assessment: (5 min)

To assess the students, ask them to how we can find the perimeter of a square. Ask them to solve Q1(a, b, c) of “Learning Check 8.1” at page 159 of their textbook in their notebooks.

Homework: (2 min)

Solve Q1(d-f) and Q3 of “Learning Check 8.1” at page 159 and 160 of their textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 4**

Unit Name: Perimeter and area **Topic: Perimeter of Rectangle** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find and apply formulas to find perimeter of a rectangular region.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 157-160, Flash card of rectangles of different length and widths

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students how we can find the perimeter of square? Draw a square of length 8 m on the board. Call a student to the front of the class and ask him/her to find the perimeter of the square. Take his/her responses and appreciate them for their correct working.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students to day we will find the perimeter of the rectangle. Ask students: How we can find the perimeter of the rectangle? Take their responses and appreciate them if someone gives the right answer. Now draw a rectangle on the board and point out towards its sides and tell them that as the length of opposite sides are equal in length so name the length with capital letter "L" and name its width with capital letter "w". Tell them that as we know that the perimeter of any shape is the sum of the length of all its sides.

Perimeter of rectangle = $L + L + W + W = 2L + 2W = 2(L + W)$

Now draw a rectangle of length 4 cm and width 2 cm on the board and find its perimeter step by step and explain each step to students.

Activity 2:

Make small groups of students and give each student three flash cards of different lengths and widths of rectangle. Instruct them to find the perimeter of these rectangles by using formula. Roam around the class, check their work and guide them if required. Instruct them to raise hand when finished. Now call one by one each group to the front of the class and ask them to show their working. Appreciate them for their good work and the group with accurate work is the winner. Ask students to open their textbook page 157 and 158 and learn about the perimeter of the rectangle and solve the examples given in the textbook in their notebook.

Sum Up: (3 min)

Sum up the lesson by retelling students how we can find the perimeter of the rectangle by using formula by solving different examples on the board.

Assessment: (5 min)

To assess the students, ask them to how we can find the perimeter of a rectangle. Ask them to solve Q2(a, b, c) of "Learning Check 8.1" at page 159 of their textbook in their notebooks.

Homework: (2 min)

Solve Q2(d-f) and Q4 of "Learning Check 8.1" at page 159 and 160 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 5**

Unit Name: Perimeter and area **Topic: Area of square** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find and apply formulas to find area of a square region.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 160-162, Flash cards of square of different length

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students: How can we find the perimeter of square? Take their responses and ask them to draw square of 7 cm in their notebook and then find its perimeter. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 min)

Activity 1:

Tell students today we will find the area of the square. Ask students: How can we find the area of the square? Take their responses and appreciate them if someone gives the right answer. Now draw a square on the board and point out towards its sides and name it with capital letter “L”. Tell them that as we know that the area of any shape is the space enclosed by any shape. The area of the square is obtained by multiplying its length with length. Tell them that as the length of all sides of the square are equal in length so.

Area of square = $L \times L$

Now draw a square of length 2 cm on the board and find its area step by step and explain each step to students.

Activity 2:

Make small groups of students and give each student three flash cards of different lengths of square. Instruct them to find the area of these squares by using formula. Roam around the class, check their work and guide them if required. Instruct them to raise hand when finished. Now call one by one each group to the front of the class and ask them to show their working. Appreciate them for their good work and the group with accurate work is the winner. Ask students to open their textbook page 160 and learn about the area of the square and solve the examples given in the textbook in their notebook.

Sum Up: (3 min)

Sum up the lesson by retelling students how we can find the area of the square by using formula by solving different examples on the board.

Assessment: (5 min)

To assess the students, ask them how we can find the area of a square. Ask them to solve Q1 of “Learning Check 8.2” at page 161 and 162 of their textbook in their notebooks.

Homework: (2 min)

Solve Q3 of “Learning Check 8.2” at page 162 of their textbook in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 6**

Unit Name: Perimeter and area **Topic: Area of Rectangle** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Find and apply formulas to find area of a rectangular region.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 154, 161-162, Flash card of rectangles of different length and widths

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students how we can find the perimeter of rectangle? Draw a rectangle of length 5 cm and width of 3 cm. Call a student to the front of the class and ask him/her to find the perimeter of the rectangle. Take his/her responses and appreciate them for their correct working.

Main Activities/Concept Building:

(22 min)

Activity 1:

Tell students to day we will find the area of the rectangle. Ask students: How we can find the area of the rectangle? Take their responses and appreciate them if someone gives the right answer. Now draw a rectangle on the board and point out towards its sides and tell them that as the length of opposite sides are equal in length so name the length with capital letter "L" and name its width with capital letter "w". Tell them that as we know that the area of any shape is the space enclosed by any shape so we get the area of the rectangle by multiplying its length by its width.

Area of rectangle = $L \times W$

Now draw a rectangle of length 9 cm and width 7 cm on the board and find its area step by step and explain each step to students.

Activity 2:

Make small groups of students and give each student three flash cards of different lengths and widths of rectangle. Instruct them to find the area of these rectangles by using formula. Roam around the class, check their work and guide them if required. Instruct them to raise hand when finished. Now call one by one each group to the front of the class and ask them to show their working. Appreciate them for their good work and the group with accurate work is the winner. Ask students to open their textbook page 161 and learn about the area of the rectangle and solve the examples given in the textbook in their notebook.

Sum Up:

(3 min)

Sum up the lesson by retelling students how we can find the area of the rectangle by using formula by solving different examples on the board. Also discuss with them the answer of question given at textbook page 154.

Assessment:

(5 min)

To assess the students, ask them to how we can find the area of a rectangle. Ask them to solve Q2 of "Learning Check 8.2" at page 162 of their textbook in their notebooks.

Homework:

(2 min)

Solve Q4 of "Learning Check 8.2" at page 162 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 1** **Lesson Plan: 7**

Unit Name: Perimeter and area **Topic: Real life situation** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real life situations involving perimeter and area of square and rectangular regions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 165

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them: How we can find the area and perimeter of square? Take their responses and call a student to the front of the class and ask him/her to write the formula to find the area and perimeter of square. Take his/her response and ask the rest of the class to check and correct if needed. Appreciate them for their correct work.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the statement “Ali has a square frame of length 15 cm. what is the perimeter and area of the frame?” on the board. Instruct students to read the statement and tell what is given and what we have to find. Take their responses and tell them that the length of the square frame is given and we have to find the area and perimeter of the photo frame. As the square have same length of all sides. Tell them that we can find the perimeter of the frame by adding all its length and we can find the area of the frame by multiplying its length by length. Now solve it step by step on the board and explain each step to them.

Activity 2:

Make two groups of students. instruct them to make real-life situation of finding area and perimeter of square and then find area and perimeter. Take round and check their work. Now ask each group to come forward and share their real-life situation to the other group. Appreciate them for their good work.

Sum Up: (3 min)

Sum up the lesson by re-telling students about real-life situation of area and perimeter of square by giving different real life examples to them.

Assessment: (5 min)

Assess the students learning by asking to solve Q1 of “Learning check 8.3” given at textbook page 165 of their textbook.

Homework: (2 min)

Solve Q2 of “Learning check 8.3” given at textbook page 165 of their textbook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 1**

Unit Name: Perimeter and area **Topic: Real life situation** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real life situations involving perimeter and area of square and rectangular regions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 165

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask them: How we can find the area and perimeter of rectangle? Take their responses and call a student to the front of the class and ask him/her to write the formula to find the area and perimeter of rectangle. Take his/her response and ask the rest of the class to check and correct if needed. Appreciate them for their correct work.

Main Activities/Concept Building: (25 min)

Activity 1:

Write the statement “Rabia has rectangle room of length 10 metres and width 7 m. what is the perimeter and area of the room?” on the board. Instruct students to read the statement and tell what is given and what we have to find. Take their responses and tell them that the length of the rectangle room is given and we have to find the area and perimeter of the room. As the rectangle has two long and two short sides of equal length. Tell them that we can find the perimeter of the room by adding all its length and width and we can find the area of the room by multiplying its length by width. Now solve it step by step on the board and explain each step to them.

Activity 2:

Make two groups of students. instruct them to make real-life situation of finding area and perimeter of rectangle and then find area and perimeter. Atke round and check their work. Now ask each group to come forward and share their real-life situation to the other group. Appreciate them for their good work..

Sum Up: (3 min)

Sum up the lesson by re-telling students about real-life situation of area and perimeter of rectangle by giving different real life examples to them.

Assessment: (5 min)

Assess the students learning by asking to solve Q3 of “Learning check 8.3” given at textbook page 165 of their textbook in their notebook.

Homework: (2 min)

Solve Q4 of “Learning check 8.3” given at textbook page 165 of their textbook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 2**

Unit Name: Perimeter and area **Topic: Real life situation** **Date**

Objective(s):

At the end of this period, the students will be able to:

Solve real life situations involving perimeter and area of square and rectangular regions.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 163-165

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework. Ask them: What is formula to find the area and perimeter of square?

What is the area and perimeter of rectangle? Take their responses and appreciate them for their correct answer..

Main Activities/Concept Building: (22 min)

Activity 1:

Make two groups of the students. Instruct first group to make real life situation of finding area and perimeter of square and the second group to make real-life situation of finding area and perimeter of rectangular region. Roam around the class, check their work and guide if required. Instruct them to raise hand when finished. Now call first group and ask them to share their real-life situation and their solution to the other group. Similarly call second group and ask them to share their real-life situation to the first group. Check their work and discuss with them about their common mistakes. Appreciate them for their good work.

Activity 2:

Ask students to open their textbook page 163 and 164 and solve the examples given in the textbook on the board and example each step to them. Ask them to solve these examples in their notebooks again.

Sum Up: (3 min)

Sum up the lesson by re-telling students how we can solve the real-life situations of finding perimeter of square and rectangle by solving different examples on the board.

Assessment: (5 min)

Assess the students learning by asking to solve Q5 (a) of "Learning check 8.3" given at textbook page 165 of their textbook in their notebook.

Homework: (2 min)

Solve Q5 (b) of "Learning check 8.3" given at textbook page 165 of their textbook in their notebook.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 3**

Unit Name: Perimeter and area **Topic: Summary and review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 165 and 166,

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “Perimeter and area”.

Ask them the following to let them revise the basic concepts of perimeter and area:

“What is meant by closed region?”

Give some examples of figures of closed region? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 165 and 166 of their textbooks. Ask them to solve Q1 in their textbook and Q2 of “Unit Check 8” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 165.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise the classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 4**

Unit Name: Perimeter and area **Topic: Summary and review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 165 and 166

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “perimeter and area”.

Ask them the following to let them revise the basic concepts of perimeter and area:

“How we can find the perimeter of square?”

How can we find the area of the square shape? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 166 of their textbooks. Ask them to solve Q3 and Q4 of “Unit Check 8” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 165.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise the classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 5**

Unit Name: Perimeter and area **Topic: Summary and review Exercise** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 165 and 166

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “perimeter and area”.

Ask them the following to let them revise the basic concepts of perimeter and area:

“How we can find the perimeter of rectangle?”

How can we find the area of the rectangle shape? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 166 of their textbooks. Ask them to solve Q5 and Q6 of “Unit Check 8” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 165.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise the classwork.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 6**

Unit Name: Data Handling **Topic: Average** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find and describe average of given quantities in the data.

Resource Material:

Chalk/Marker, White/Blackboard, beads, Textbook pages 168, 170

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask the students to tell: If there are 36 crayons and 4 children then how many crayons does each child get?

Take their responses and explain them that we can divide the number of crayons by number of children then we get the number of crayons does each child.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell the students that today they are going to learn about average. Ask students: Do you know about What is average take their response and appreciate if someone gives the right answer. Now call any three students to the front of the class and distribute beads, 4, 8 and 6 beads to 1st, 2nd and 3rd student respectively. Now ask the students, “If the beads are to be shared equally between these 3 students, how many beads does each get?” Appreciate if anyone gives the right answer. Now explain to them that the total number of beads is 18 ($4 + 8 + 6 = 18$). To find the equal number of beads that each student get we have to divide the total beads by the number of students, i.e.

$$18 \div 3 = 6$$

So, each student gets 6 beads.

Now explain the term average to students that single central value that represent the group of values of any data is called average. As in the above example the average numbers of beads are 6 beads that each student gets.

Tell them that average of two or more quantities can be obtained by finding the sum of the values and then by dividing it by number of values.

$$\text{Average} = \frac{\text{Sum of all values given}}{\text{Number of values}}$$

Write different quantities on the board and find the average by using formula and explain each step to them. Explain to them we use the term average when we talk about the temperature of the city in one month, the average number of people visited the museum etc.

Sum Up: (3 min)

Sum up the lesson by explaining students what is average and how we find the average of quantities by solving example given at textbook page 168 of their textbook and find the average marks.

Assessment: (8 min)

To assess the students learning ask them what is meant by average and how we find the average of given quantities. Ask them to tell the formula to find the average of the quantities.

Homework: (2 min)

Solve Q1(a, b, c) of “Learning Check 9.1” at page 170 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 2** **Lesson Plan: 7**

Unit Name: Data Handling **Topic: Average** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Find and describe average of given quantities in the data.

Resource Material:

Chalk/Marker, White/Blackboard, textbook page 169 and 170

Teaching & Learning Activities:

Opening Activities/Warm-up: (3 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask them about their homework. Call a student to the front of the class and ask him/her to write the formula to find the average. Write the quantities on the board and ask students to find the average of these quantities. Roam around and check their work and appreciate them for their correct solution.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about how we find the sum of quantities if the average and number of quantities are given. Tell them that if average and number of quantities are given then we find the sum of quantities by multiplying average by number of quantities.

$$\text{Sum of quantities} = \text{Average} \times \text{Number of quantities}$$

Write the statement "if average of 5 quantities is 65. What is the sum of quantities?" on the board and tell students now average and number of quantities are given and we have to find the sum of quantities. Now by using formula find the sum of values and explain each step to students.

Activity 2:

Give them worksheet 1 and ask them to complete the given worksheet 1 by following instructions. Roam around the class and check their work. Also discuss with them about their common mistakes. Appreciate them for their correct work.

Sum Up: (3 min)

Sum up the lesson by retelling students about how we find the sum of quantities if number of quantities and average is given by solving examples given on textbook page 169.

Assessment: (8 min)

To assess the students learning, ask them to solve Q1(d, e) of "Learning Check 9.1" at page 170 of their textbooks in their notebooks.

Homework: (2 min)

Solve Q2 of "Learning check 9.1" given at textbook page 170 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find the sum of quantities if numbers of quantities are 7 and average is 71.

2. If the average of 9 quantities is 101. Find the sum of quantities.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3

Periodic Unit: 2

Week: 3

Lesson Plan: 1

Unit Name: Data Handling

Topic: Average

Date:

Objective(s):

At the end of this period, the students will be able to:

Find and describe average of given quantities in the data.

Resource Material:

Chalk/Marker, White/Blackboard, 169 and 170, worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: How we find the average? How we find the sum of quantities if the number of quantities and average is given. Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

(22 min)

Activity 1:

Tell students today we will learn about how we find the number of quantities if average and sum of quantities are given.

Write the statement "If sum of quantities is 440 and average of the quantities is 55. Find the number of quantities. Ask students to read the statement and tell what is given and what we have to find. Take their responses and appreciate if someone gives the right answer. Now tell them that if average and sum of quantities are given then we have to find number of quantities. To find the number of quantities we have to divide the sum of quantities by average.

$$\text{Number of quantities} = \text{Sum of quantities} \div \text{average}$$

Now put the values in the formula and find the number of quantities and explain it to students.

Activity 2:

Give them worksheet and ask them to complete the given worksheet by following instructions. Roam around the class and check their work. Also discuss with them about their common mistakes. Appreciate them for their correct work.

Sum Up:

(3 min)

Sum up the lesson by retelling students about how we find the sum of quantities if number of quantities and average is given by solving examples given on textbook page 169 and 170.

Assessment:

(8 min)

To assess the students learning, ask them how we find the number of quantities if the sum of quantities and average is given.

Homework:

(2 min)

Solve Q3 of "Learning check 9.1" given at textbook page 170 of their textbook in their notebooks.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. If sum of quantities are 900 and average is 90. Find the number of quantities.

2. Find the number of quantities if the average is 30 and the sum of quantities 630.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 2**

Unit Name: Data Handling **Topic: Average** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 169, 171 and 172

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: How we find the average? How we find the sum of quantities? How we find number of quantities. Take their responses and appreciate them for their correct response.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about how to average is used in our daily life. Write statement “The weight of 5 students of class five is 34 kg, 39 kg, 40 kg, 35 kg and 32 kg. What is the average weight of these students?” on the board. Ask students to read the statement and tell what are given and what we have to find. Take their responses and tell them that we have to find the average weight of 5 students. To find the average first add the weights of 5 students and then divide it by 5 to get the average weight. Now solve step by step on the board and explain each step to them.

Activity 2:

Make pairs of students. Instruct each pair to make the real-life situation of finding average of the given quantities. Roam around and check their work. Instruct them to raise hand when finished. Instruct them now to come one by one to the front of the class and share their findings to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by retelling students how average is used in our real-life situation by asking them to open their textbook page 171 and solve the example 1.

Assessment: (5 min)

To assess students ask them to solve Q1 of “Learning check 9.2” given at textbook page 172 in their notebooks. Solve “Quick check” given at textbook page 169 in their notebooks.

Homework: (2 min)

Solve Q3 of “Learning check 9.2” given at textbook page 172 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐ Not Achieved ☐ Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 3**

Unit Name: Data Handling **Topic: Average** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 171 and 172, worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Ask students make the real-life story of finding average and share with their class-fellows.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about the real-life stories of average. Write the statement “The average volume of water in 5 bottles is 18.5 litres. Find the total volume of water.” on the board. Ask a student to read the statement and tell what is given and what we have to find. Take their responses and tell them that we have to find total volume of water in five bottles. Tell them that to find the total volume we have to multiply the average with number of bottles. Now solve step by step on the board and explain each step to them.

Activity 2:

Make pairs of students. Instruct each pair to make the real-life situation of finding average or sum of quantities of the given quantities. Roam around and check their work. Instruct them to raise hand when finished. Instruct them now to come one by one to the front of the class and share their findings to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by retelling students how average is used in our real-life situation by asking them to open their textbook page 171 and solve the example 2.

Assessment: (5 min)

To assess students ask them to solve the give worksheet. Roam around and check their work and discuss with about their common mistakes.

Homework: (2 min)

Solve Q2 of “Learning check 9.2” given at textbook page 172 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. The average length of 5 pieces of rope is 90m. What is the total length of the pieces of ropes?

2. Find the sum of marks if Ali average marks are 70 and number of subjects are 7.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 4**

Unit Name: Data handling **Topic: Average** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 171 and 172

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them about their homework. Call a student to the front of the class and ask him/her to write the formula to find the average. Call another student to front of the class and ask him/her to write the formula to find the sum of quantities if the number of quantities and average is given. Call another student to the front of the class and ask him/her to write the formula to find the number of quantities if the sum and average of quantities are given. Take their responses and appreciate them for their correct work.

Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about the real-life stories of average. Write the statement “If the average number of fish caught by the fisher man is 26 and the total numbers of fish are 312. Then find the number of fisherman.” on the board. Ask students to read the statement and tell what are given and what we have to find. Take their responses and tell them that we have to find number of fisherman. Tell them that to find the fisherman we have to divide the total number of fish by average. Now solve step by step on the board and explain each step to them.

Activity 2:

Make pairs of students. Instruct each pair to make the real-life situation of finding average or sum of quantities and to find number of quantities if sum of quantities and average is given. Roam around and check their work. Instruct them to raise hand when finished. Instruct them now to come one by one to the front of the class and share their findings to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by retelling students how average is used in our real-life situation by asking them to open their textbook page 171 and solve the example 3.

Assessment: (5 min)

To assess students ask them to solve Q4 of “Learning check 9.2” given at textbook page 172 in their notebooks.

Homework: (2 min)

Solve Q5 of “Learning check 9.2” given at textbook page 172 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 5**

Unit Name: Data Handling **Topic: Bar graph** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Organize the given data using bar graph.

Draw horizontal and vertical bar graphs for given data.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 172 and 173, Wallchart of bar graph

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: What is average and how we find the average of the given quantities. Take their responses and appreciate them for their correct responses.

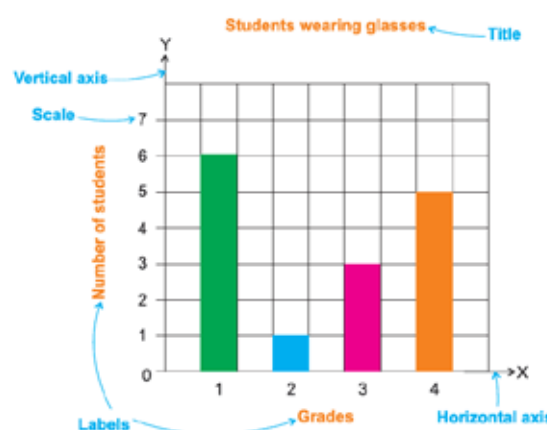
Main Activities/Concept Building: (22 min)

Activity 1:

Tell students today we will learn about bar graph. Ask them:

Do you know about bar graph? Take their responses and appreciate if someone gives the right answer. Now tell them that as graph is the pictorial representation of the data. When we represent data in graph by using bars of equal width then that graph is called bar graph.

Now paste a wallchart of a bar graph on the board and tell students today we will learn about the parts of bar graph. First point out towards the axis and tell them that each bar graph has vertical axis that is called y-axis and the horizontal axis called x-axis. Now point out towards the titles and explain to them that every graph has a title that tell us what about the bar graph is. Tell them that the bottom and the side of the graph are labelled to tell what kind of data is shown. Point out towards the scale and tell them that each graph has a scale it shows the value of distance between two marks. Now ask students to draw a bar graph and then labelled its parts. roam around the class, check their work and guide them if required.



Sum Up: (3 min)

Sum up the lesson by repeating the retelling students about what is the graph and what is bar graph and parts of the bar graph. Ask students to open their textbook page 172 and 173 and learn about bar graph and its parts.

Assessment: (5 min)

To assess students learning, paste a wallchart of bar graph and ask students about different parts of the graph by pointing different parts of the graph.

Homework: (2 min)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 6**

Unit Name: Data Handling **Topic: Drawing Bar graph** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Organize the given data using bar graph.

Draw horizontal and vertical bar graphs for given data.

Resource Material:

Chalk/Marker, White/Blackboard, 173, 174 and 176

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

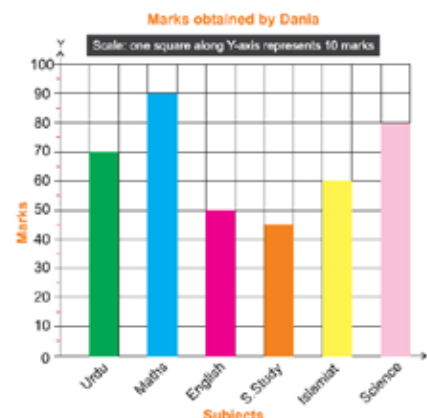
Ask students about their homework. Ask students: Do you know what is bar graph? How we can represent data using bar graph? What is meant by scale of the graph? What is meant by title of the graph? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (25 min)

Activity:

Tell students today we will learn how to draw a vertical bar graph.

Ask students: Do you know what is meant by vertical bar graph? Take their responses and tell them that when the bars of the graph are vertical then that graph is called vertical bar graph. Ask students to open their textbook page 173 and ask them to read the statement and observe the table which shows the Danis’s marks in different subjects. Tell them that now we show these marks using bar graph. Tell them that first we draw x-axis and y-axis. As the graph is vertical bar graph so the subjects is along the x-axis and the marks are along the y-axis. The next step is to choose the suitable scale according to the given data. We choose 1 square along y-axis is equal to 10 marks. Now one by one colour the squares according to the values given and explain to students.



Sum Up: (3 min)

Sum up the lesson by re-telling students how we can draw a vertical bar graph by drawing a vertical bar graph on the board and explain each step of drawing bar graph to students.

Assessment: (5 min)

To assess students learning, ask them what is meant by vertical bar graph and ask them to collect the data of favourite fruits of their class and then represent that data by using vertical bar graph.

Homework: (2 min)

Solve Q1 of “learning Check 9.3” at textbook page 176 in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 3** **Lesson Plan: 7**

Unit Name: Data Handling **Topic: Drawing bar graph** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Organize the given data using bar graph.

Draw horizontal and vertical bar graphs for given data.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 174-176

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Ask students about their homework. Ask students: what is meant by vertical bar graph? How we can draw vertical bar graph? Take their responses and ask them to write the steps to draw a vertical bar graph.

Main Activities/Concept Building:

(25min)

Activity 1:

Tell students today we will learn how to draw a horizontal bar graph. Ask students: Do you know what is meant by horizontal bar graph? Take their responses and tell them that when the bars of the graph are horizontal then that graph is called horizontal bar graph. Ask students to open their textbook page 174 and 175 and ask them to read the statement of the example 2 and observe the table which shows the temperature of different cities of Pakistan in the month of January. Tell them that now we show these temperature of different cities using bar graph. Tell them that first we draw x-axis and y-axis. As the graph is horizontal bar graph so the temperature is along the x-axis and the cities are along the y-axis. The next step is to choose the suitable scale according to the given data. We choose 1 square along x-axis is equal to 3°C.

Now one by one colour the squares according to the values given and explain to students.

Sum Up:

(3 min)

Sum up the lesson by explaining to students about horizontal bar graph and how we draw a horizontal bar graph by drawing graph on the board and explain each step to them

Assessment:

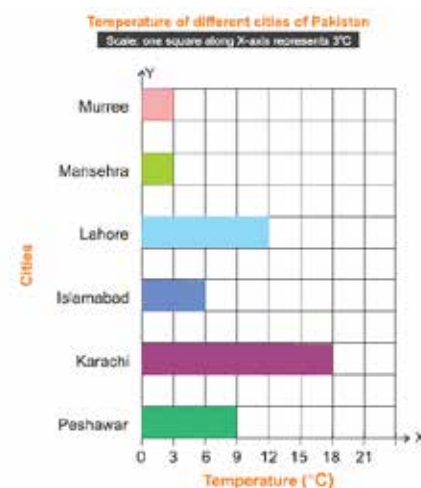
(5 min)

To assess the students, ask them to solve Q2 of "Learning check 9.3" given at textbook page 176 in their notebooks.

Homework:

(2 min)

Solve Q4 of "Learning check 9.3" given at textbook page 176 in their notebooks.



Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 1**

Unit Name: Data handling **Topic: Drawing Bar graph** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Organize the given data using bar graph.

Draw horizontal and vertical bar graphs for given data.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 174 and 176

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students:

What is meant by vertical bar graph?

What is meant by horizontal bar graph?

How we can draw a bar graph? Tell the steps of drawing bar graph? Take their responses and appreciate them for their correct answers

Main Activities/Concept Building: (25 min)

Activity 1:

Make two groups of students. give each group flash card of data table. Ask them to observe the data given in the table and instruct first group to draw vertical bar graph by using the data given on the flash card and write the steps of drawing bar graph. Instruct the second group by using data given in the flash card draw horizontal bar graph. Roam around the class, check their work and guide them if required. Instruct them to come one by one to the front of the class and show their working to the whole class. Appreciate them for their good work and discuss with them about their common mistakes.

Activity 2:

Ask students to open their textbook page 173 to 175. Instruct them to solve the example 1 and example 2 again in their notebook and steps to draw vertical and horizontal bar graph. Roam around the class, check their work and guide them if needed. Appreciate them for their good work. Discuss with them about their common mistakes.

Sum Up: (3 min)

Sum up the lesson by explaining to students that notable notes given at textbook page 174 and 175. In graph, vertical bar shows that graph is vertical bar graph and the horizontal bars shows the graph is horizontal bar graph.

Assessment: (5 min)

To assess the students, ask them to solve the “Quick Check” given at page 174 of their textbook in their notebook.

Homework: (2 min)

Solve Q3 and Q5 of “Learning check 9.3” given at textbook page 176 in their notebooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 2**

Unit Name: Data handling **Topic: Reading Bar graph** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Read and interpret a bar graph given in horizontal and vertical form.

Solve real life situations using data presented in bar graphs.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 177 and 179

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: Do you know what is bar graph. How we can represent data using bar graph? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

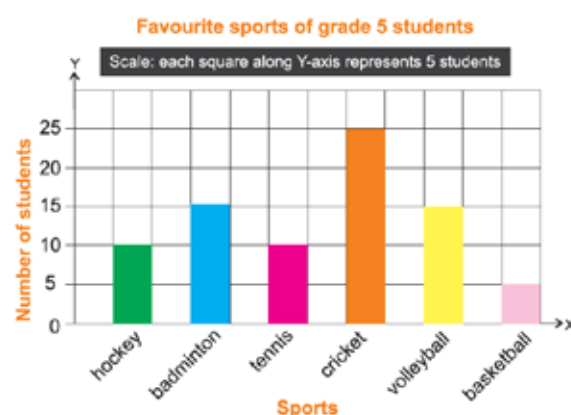
(25 min)

Activity 1:

Tell students today we will learn about how to read and interpret bar graph. Ask students to open their textbook page 177. Ask students to observe the vertical bar graph and the information that is shown by the graph.

By observing we know that the bar graph shows that data of favourite sports of grade 5 students. Instruct them to read the graph carefully and tell what is along x-axis and y-axis. Take their responses and tell them that numbers of students are along y-axis and the sports are along x-axis.

Instruct students to read the graph and then answer the question given the textbook.



Sum Up:

(3 min)

Sum up the lesson by explaining to about the bar graph and how to read the bar graph by again solving example 1 in their notebook.

Assessment:

(5 min)

To assess the students, ask them observe the graph in the example 1 and tell how many students like cricket and basketballs.

Homework:

(2 min)

Solve Q1 of “Learning Check 9.4” on pages 179 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 3**

Unit Name: Data handling **Topic: Reading Bar graph** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Read and interpret a bar graph given in horizontal and vertical form.

Solve real life situations using data presented in bar graphs.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 178 and 180

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: Do you know what is horizontal bar graph. How we can represent data using horizontal bar graph? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building:

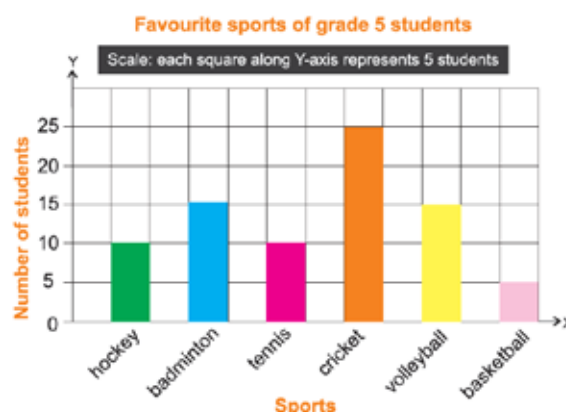
(25 min)

Activity 1:

Tell students today we will learn about how to read and interpret horizontal bar graph. Ask students to open their textbook page 178. Ask students to observe the horizontal bar graph and the information that is shown by the graph that is “Faisal collected data of the number of people who visited the museum during one week and then made horizontal bar graph.”

Instruct them to read the graph carefully and tell what is along x-axis and y-axis. Take their responses and tell them that days are along y-axis and numbers of people are along x-axis.

Instruct students to read the graph and then answer the question given the textbook.



Sum Up:

(3 min)

Sum up the lesson by explaining to about the bar graph and how to read the horizontal bar graph by again solving example 2 in their notebook.

Assessment:

(5 min)

To assess the students, ask them observe the graph in the example 2 and tell how many people visited the museum on first three days of week? Take their responses and appreciate them for their correct answer.

Homework:

(2 min)

Solve Q2 of “Learning Check 9.4” on pages 180 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 4**

Unit Name: Data handling **Topic: Reading Bar graph** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Read and interpret a bar graph given in horizontal and vertical form.

Solve real life situations using data presented in bar graphs.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook pages 181 and 182

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask students about their homework. Ask students: Do you know about square and triangle? How many side a square and triangle has? What is pyramid and pyramid shaped objects? Take their responses and appreciate them for their correct response.

Main Activities/Concept Building:

(25 min)

Activity 1:

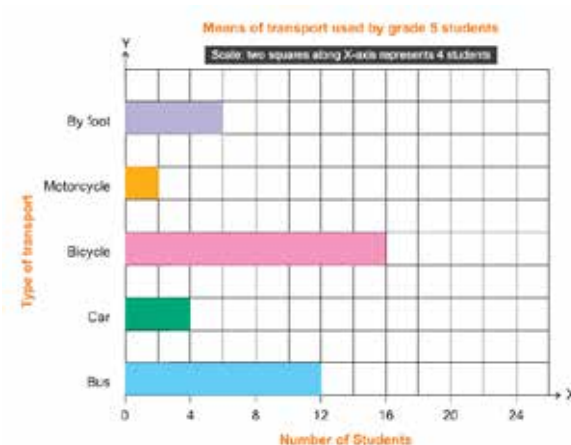
Ask students to open their textbook page 181. Instruct them to read the statement of theq3 of “learning check 9.4”. The bar graph shows the that of the means of transport used by grade 5 students to come to school.

Instruct students to read the graph and answer the question given in the textbook. Roam aorund the class, check their work and guide them where needed.

Appreciat them for their good work. Ask them to share their findings with each other and correct each other where needed.

Activity 2:

Make two groups of students and give each group a paper with bar graph on it and questions about that graph. Ask students to read and interpret that graph and then answer the question given. Roam around the class, check their work and appreciate them for their good work. Instruct them to share their findings about graph withneach other and then correct each other if needed.



Sum Up:

(3 min)

Sum up the lesson by explaining to how to read and interpret the vertical and horizontal bar graph.

Assessment:

(5 min)

To assess the students, ask them to observe the graph and answer the following questions: How many students use car and bus to come to school?

How many students use bicycle than bus?

Take their responses and appreciate them for their correct answer

Homework:

(2 min)

Solve Q4 of “Learning Check 9.4” on pages 182 of their textbooks.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 5**

Unit Name: Data Handling **Topic: Summary and review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 183 and 184

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “data handling”.

Ask them the following to let them revise the basic concepts of average:

“What is meant by average?”

How can we find the average? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 183 and 184 of their textbooks. Ask them to solve Q1 and Q2 of “Unit Check 9” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 183.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q3 given at page 184 of their textbooks in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 6**

Unit Name: Data Handling **Topic: Summary and review Exercise** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 183 and 184

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, "Assalaamu Alaikum" and start with the name of Allah.

Ask students: How are you? Encourage them to say, "Alhamdulillah".

Tell students that they are going to recall all the concepts of the Unit "data handling".

Ask them the following to let them revise the basic concepts of drawing bar graph:

"What is meant by vertical and horizontal bar graph?"

How can we draw a bar graph? Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 184 of their textbooks. Ask them to solve Q4 and Q5 of "Unit Check 9" in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 183.

Assessment: (0 min)

N/A

Homework: (2 min)

Revise the classwork.

Teacher's Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 4** **Lesson Plan: 7**

Unit Name: Data Handling **Topic: Summary and review Exercise** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Recall the concepts of the whole unit.

Resource Material:

Chalk/Marker, White/Blackboard, Textbook page 183-186

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Tell students that they are going to recall all the concepts of the Unit “data handling”.

Ask them the following to let them revise the basic concepts of bar graph:

“How we can read and interpret the bar graph?”

Take their responses and appreciate them for their correct answer.

Main Activities/Concept Building: (30 min)

Activity:

Have students open pages 184 and 185 of their textbooks. Ask them to solve Q6 and Q7 of “Unit Check 9” in their notebooks. Walk around the class and appreciate them for the correct solutions. Guide them if required.

Sum Up: (3 min)

Sum up the lesson by repeating the summary and vocabulary words of the unit given at page 183.

Assessment: (0 min)

N/A

Homework: (2 min)

Solve Q8 given at page 186 of their textbooks in their notebook.

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 1**

Unit Name: Perimeter and area **Topic: Revision** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Perimeter and area”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions perimeter and area of square.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

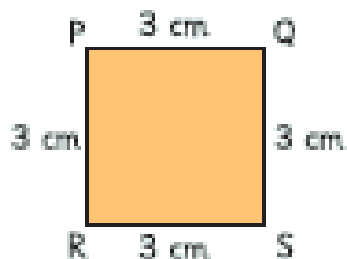
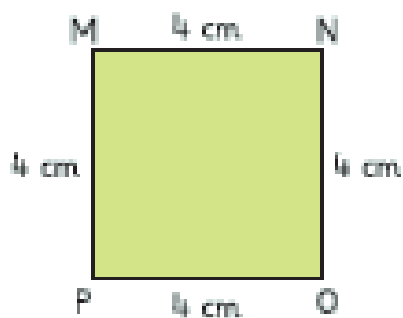
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find the perimeter and area of square whose lengths are given below.



2. The length of the square shaped room is 16 m. what is the perimeter and area of the room?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 2**

Unit Name: Perimeter and area

Topic: Revision

Date:

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Perimeter and area”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up:

(5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to perimeter and area of rectangle.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building:

(30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up:

(5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment:

(0 min)

N/A

Homework:

(0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

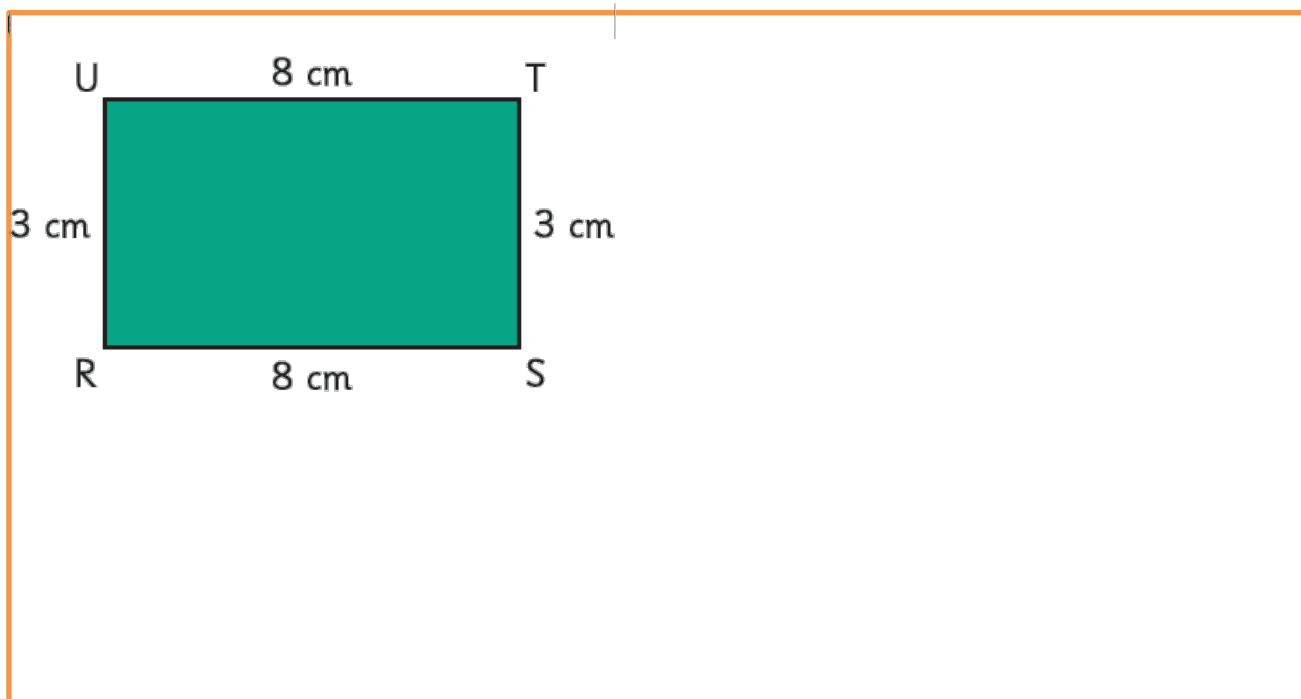
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find the perimeter and area of the given rectangles.



2. A rectangular grassy path has an area of 80 m^2 and its width is 8 m. What is the perimeter of the grassy path?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 3**

Unit Name: Data Handling **Topic: Revision** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Data Handling”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to average.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Find the average mass of 15 kg, 5 kg 18 kg 30 kg.

2. Find the sum of quantities if the numbers of quantities are 7 and average is 80.

3. If the average if 40 and sum of quantities are 840. Find the number of quantities.

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 4**

Unit Name: Data Handling **Topic: Revision** **Date:** _____

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Data Handling”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to average.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. If the average marks obtained by 7 students in Maths is 80. Find the total marks?

2. If the total length of 10 pieces are 180m. What is the average length?

3. The average age of 15 students of grade 5 is 12 year. What is the sum of their ages?

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 5**

Unit Name: Data Handling **Topic: Revision** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Data Handling”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions relevant to drawing vertical bar graph.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. Ayesha's score out of 100 marks is given below. Draw a vertical bar graph of the given data.

Subjects	English	Urdu	Science	Maths	Islamic Studies	Computer
Marks	85	75	80	90	55	60

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 6**

Unit Name: Data Handling **Topic: Revision** **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Data Handling”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions drawing horizontal bar graph.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. The following table shows the number of children that come for morning walk in park during a week. Draw horizontal bar graph by using this data.

Days	Mon	Tue	Wed	Thu	Fri	Sat
No. of Children	40	43	36	39	47	41

Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Term: 3 **Periodic Unit: 2** **Week: 5** **Lesson Plan: 7**

Unit Name: Data Handling **Topic:** Revision **Date:**

Objective(s):

At the end of this period, the students will be able to:

Revise the concept of the unit “Data Handling”.

Resource Material:

Chalk/Marker, White/Blackboard, Worksheet

Teaching & Learning Activities:

Opening Activities/Warm-up: (5 min)

Say, “Assalaamu Alaikum” and start with the name of Allah.

Ask students: How are you? Encourage them to say, “Alhamdulillah”.

Ask them a few questions reading and interpreting vertical bar graph.

Tell students that they are going to revise and practice the main concepts of the Unit by solving a worksheet.

Main Activities/Concept Building: (30 min)

Activity:

Give the worksheet to students. Instruct them to complete it. Roam around the class, check their work and guide them if needed.

Sum Up: (5 min)

Based on the worksheets solved by students, retell the basic concepts and correct the common mistakes.

Assessment: (0 min)

N/A

Homework: (0 min)

N/A

Teacher’s Self-Evaluation:

Target: Achieved ☐

Not Achieved ☐

Partially Achieved ☐

Reason/Comments:

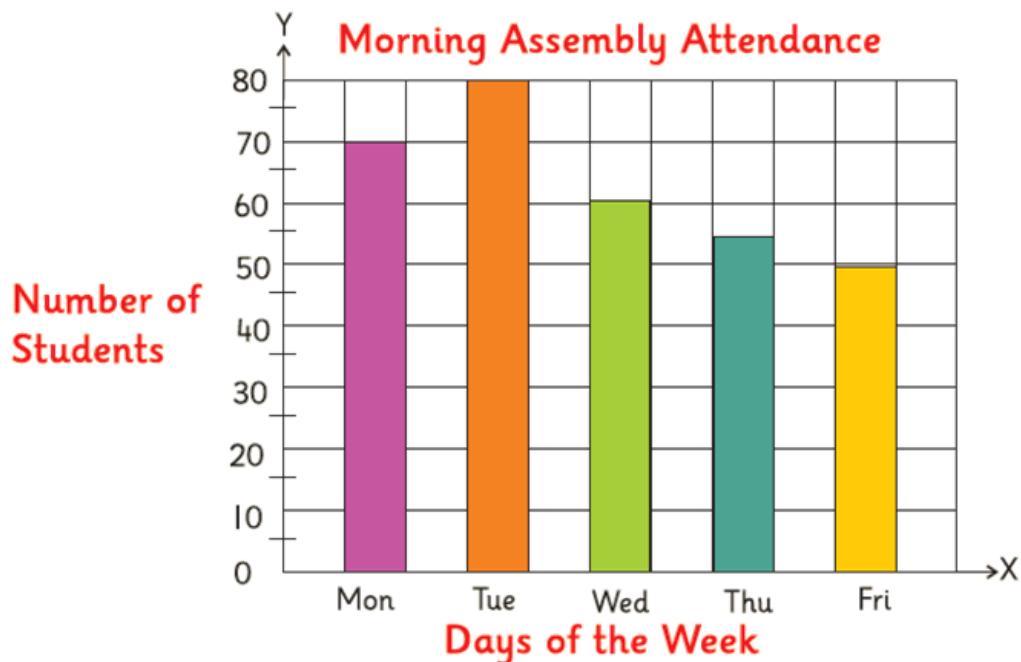
Type	Series	Subject	Grade	Teacher	Time
Lesson Planners	NSS (SNC – KPK&FEDERAL)	Mathematics	5		40 Min

Worksheet

Name: _____

Date: _____

1. The bar graph shows the number of students from grade 1 to 5 who attend the morning assembly on different days of week. Each square represents 10 students. Read the graph and answer the following questions.



- a) How many students were present in the morning assembly on Monday?
- b) On which day of the week were the greatest number of students present in the morning assembly?
- c) How many more students were present on Wednesday than on Thursday?
- d) On which day of the week were the least number of students present in the morning assembly?