Lesson Plan

Grade: Five	**Subject:** Math	**Term:** 3rd	**Time:** 40mins
Teacher's Name: _____	**Week:** 8	**Day:** 1	
Unit 9: Data Handling	**Topic:** Average		

Student Learning Outcomes:

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

- Find and describe average of given quantities in the data.
- Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, beads, Math Textbook

Warm-up Activities: 5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask the students to tell: If there are 36 pencils and 4 boxes then how many pencils does each have? Take their responses and explain them that we can divide the number of pencils by number of boxes then we get the number of pencils in each box.

Teaching & Learning Activities: 25mins

- Tell the students that today they are going to learn about average.
- Tell students, the term 'average' means a quantity that expresses a central value in a set of data.
- Tell them average is also called "arithmetic mean". Explain that average is used to evaluate and observe the efficiency of something.
- 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 ÷ 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.
- Average = Sum of all values given / Number of values

Review: 3mins

Review the lesson by explaining students what is average and how we find the average of quantities by solving example?

Evaluation: **5mins**

To evaluate the students, ask them to solve Q1 (i – ii) of Exercise 9.1 in their textbooks.

Homework: **2mins**

Solve Q1 (iii - v) of Exercise 9.1 in their textbooks.

Lesson Plan

Grade: Five	**Subject:** Math	**Term:** 3rd	**Time:** 40mins
Teacher's Name: _____	**Week:** 8	**Day:** 2	
Unit 9: Data Handling	**Topic:** Average		

Student Learning Outcomes:

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

- Find and describe average of given quantities in the data.
- Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook

Warm-up Activities: 5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Call a student to the front of the class and ask him/her to write the formula to find the average.
- Check their work and appreciate them for their correct solution.

Teaching & Learning Activities: 25mins

- 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.
  Sum of quantities = Average × Number of quantities
- Have them open their textbook page 120 and solve the given example.
- Tell students 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.
  Number of quantities = Sum of quantities ÷ average
- Now put the values in the formula and find the number of quantities and explain it to students.

Review: 3mins

Revise the lesson by telling students about how we find the sum of quantities if number of quantities and average is given. Also, how we find the number of quantities when sum of quantities and average is given.

Evaluation: 5mins

To check the students, ask them to solve Q2 of Exercise 9.1 in their textbooks.

Homework: **2mins**

Solve Q3 of Exercise 9.1 in their textbooks.

Lesson Plan

Grade: Five	**Subject:** Math	**Term:** 3rd	**Time:** 40mins
Teacher's Name: _____	**Week:** 8	**Day:** 3	
Unit 9: Data Handling	**Topic:** Average		

Student Learning Outcomes:

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

- Find and describe average of given quantities in the data.
- Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook

Warm-up Activities: 5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- 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.

Teaching & Learning Activities: 25mins

- Tell students today we will learn about how average is used in our daily life. Write statement "The weight of 4 students of class five is 34 kg, 39 kg, 40 kg, and 35 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 4 students. To find the average first add the weights of 4 students and then divide it by 4 to get the average weight. Now solve step by step on the board and explain each step to them.
- 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.

Review: 3mins

Retell students average is calculated by adding up all values and dividing the sum by number of values.

Evaluation: 5mins

To assess the students, ask them to solve Q4 of Exercise 9.1 in their textbooks.

Homework: 2mins

Solve Q5 and Q6 of Exercise 9.1 in their textbooks.

Lesson Plan

Grade: Five	**Subject:** Math	**Term:** 3rd	**Time:** 40mins
Teacher's Name: _____	**Week:** 8	**Day:** 4	
Unit 9: Data Handling	**Topic:** Average		

Student Learning Outcomes:

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

- Find and describe average of given quantities in the data.
- Solve real life situations involving average.

Resource Material:

Chalk/Marker, White/Blackboard, Math Textbook, Worksheet

Warm-up Activities: 5mins

- Before beginning the lesson, ask students to say "Tasmiya."
- Ask them about their homework. Ask students make the real-life story of finding average and share with their class-fellows.

Teaching & Learning Activities: 25mins

- 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 fishermen." 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 fishermen.
- 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.

Review: 3mins

Sum up the lesson by retelling students how average is used in our real-life situation.

Evaluation: 5mins

To assess the students, ask them to make real-life situation involving average and solve. Roam around and check their work and discuss with them about their common mistakes.

Homework: 2mins

Solve the given worksheet.

Worksheet

Name: _____ **Date: _____**

Q1. The average length of 5 pieces of rope is 90m. What is the total length of the pieces of ropes?

Q2. Find the sum of marks if Ali average marks are 70 and number of subjects are 7.

Lesson Plan

Grade: Five	**Subject:** Math	**Term:** 3rd	**Time:** 40mins
Teacher's Name: _____	**Week:** 8	**Day:** 5	
Unit 9: Data Handling	**Topic:** Bar Graph		

Student Learning Outcomes:

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:

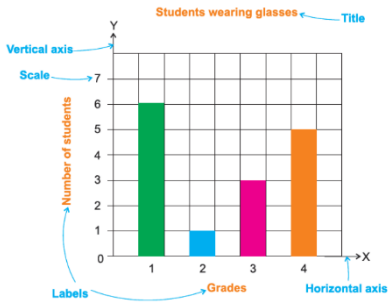
Chalk/Marker, White/Blackboard, Wallchart of bar graph

Warm-up Activities: **5mins**

- Before beginning the lesson, ask students to say "Tasmiya."
- 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.

Teaching & Learning Activities: **25mins**

- Tell students today we will learn about bar graph. 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 tells 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.

Review: **3mins**

Revise the lesson by repeating about what is the graph and what is bar graph and parts of the bar graph by drawing bar graph on the board and explain each part to them.

Evaluation: **5mins**

To evaluate 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: **2mins**

Revise the classwork.

Lesson Plan

Grade: Five	**Subject:** Math	**Term:** 3rd	**Time:** 40mins
Teacher's Name: _____	**Week:** 8	**Day:** 6	
Unit 9: Data Handling	**Topic:** Drawing Bar Graph		

Student Learning Outcomes:

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:

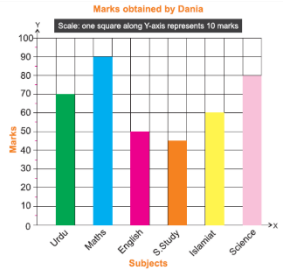
Chalk/Marker, White/Blackboard

Warm-up Activities: **5mins**

- Before beginning the lesson, ask students to say "Tasmiya."
- 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.

Teaching & Learning Activities: **25mins**

- 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 them to read the statement and observe the table which shows the Dania'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 are 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 color the squares according to the values given and explain to students.

Review: **3mins**

Revise the lesson by 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.

Evaluation: **5mins**

To assess students learning, ask them what is meant by vertical bar graph and ask them to collect the data of favorite fruits of their class and then represent that data by using vertical bar graph.

Homework: **2mins**

Solve Q1 of Exercise 9.2 in their textbooks.