

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2024-25

CLASS: 7 / SUBJECT: Maths

LESSON : 3 Data Handling

- 5 children solve a problem in 6,7,4,8 and 5 minutes. Find the average time required to solve the problem.
- Find the mean of first 10 whole numbers.
- The amount spent by students for eatables and juices is given below. Find the range and mean of the observations. ₹92, ₹100, ₹89, ₹82, ₹90, ₹95, ₹85, ₹70
- Three friends play golf. Their scores on six holes of golf are given below.

| | | | | | | |
|----------|---|----|---|---|----|---|
| Player1 | 5 | 4 | 2 | 4 | 10 | 7 |
| Player 2 | 5 | 5 | 5 | 5 | 5 | 5 |
| Player3 | 3 | 10 | 4 | 4 | 7 | 8 |

- Find the average score of Player 1.
 - Whose average score is more, Player2 or Player 3?
 - Who is the best performer among the three players?
- The highest temperature for a week in a city was recorded as follows:

| Day | Mon | Tue | Wed | Thurs | Fri | Sat | Sun |
|---------------------|-----|-----|------|-------|-----|------|-----|
| Temperature (in °C) | 35 | 34 | 33.8 | 35.2 | 32 | 32.5 | 34 |

 - Find the range of temperature in the above data.
 - Find the average temperature for the week.
 - On which days was the temperature above the average temperature?
 - For how many days was the temperature below the average temperature?
 - The following data gives the information about the number of children in 21 families in a locality. 2,1,3,4,2,2,1,3,2,6,4,3,3,2,1,1,3,2,1,1,2.
 - Find the mode of the data by tabulating the observations.
 - Find the median and mean of the data.
 - The number of workers employed month wise in the work site of a construction company for 11 months is given below. 43,52,56,47,53,60,45,40,52,48,50.

Find the mean, median and mode of the data. Are they equal?
 - The numbers on a dice, which was thrown 10 times are as follows: 3,4,6,5,5,1,2,2,5,1.

Find the mode of the values.
 - The weights (in kg) of 15 students are: 31, 35, 27, 29, 32, 43, 37, 41, 34, 28, 36, 44, 45, 42, 30.

Find the median. If the weight 44 kg is replaced by 46 kg and 27 kg by 25 kg, find the new median.

Solution:

Arranging the given data in ascending order, we have:

27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 41, 42, 43, 44, 45

Here, the number of observations n is 15(odd).

Since the number of observations is odd, therefore,

Therefore median = $((n+1)/2)^{\text{th}}$ term

Median = value of 8th term

Hence, median = 35 kg.

If 44 kg is replaced by 46 kg and 27 kg by 25 kg, then the new observations arranged in ascending order are:

25, 28, 29, 30, 31, 32, 34, 35, 36, 37, 41, 42, 43, 45, 46

∴ New median = Value of the 8th observation = 35 kg.

10. Draw the double bar graph for the following data.
Sports played by number of students of ABC school in 2018 and 2019.

| Sports | No. of students (2018) | No. of students (2019) |
|----------|------------------------|------------------------|
| Cricket | 10 | 5 |
| Tennis | 5 | 10 |
| Chess | 15 | 20 |
| Football | 10 | 15 |

11. Number of children in six different classes are given below. Represent the data on a bar graph.

| Class | V | VI | VII | VIII | IX | X |
|--------------------|-----|-----|-----|------|----|----|
| Number of children | 135 | 120 | 95 | 100 | 90 | 80 |

- (i) How do you choose the scale.
(ii) Which class has the maximum number of children?
(iii) Which class has the minimum number of children?
12. The marks obtained out of 100 by 5 students in mathematics and physics are given below. Draw a double bar graph to represent the data.

| Student | Alka | Babita | Charlie | Siddique | Uma |
|---------|------|--------|---------|----------|-----|
| Maths | 92 | 90 | 86 | 98 | 85 |
| Physics | 86 | 94 | 96 | 96 | 80 |

ANSWERS

- 1) 6 min 2) 5.5 3) Range=₹ 30 , Mean= 87.875 4) a. 5.33 b. Player 3 c. Player 3
- 5) a. 3.2°C b. 33.78°C c. Mon, Tue, Wed, Thu, Sun d. 2 days
- 6) a. Mode=2 b. Median=2 Mean=2.33 7) Mode =52, Median=50 Mean=49.64
- 8) 5 11) i) 1 unit=10 students ii) V iii) X