

Data Handling and Presentation

Class VI Mathematics – Worksheets

DATA HANDLING AND PRESENTATION

WORKSHEET-1

MCQs (PART-1) (10 × 1 = 10 marks)

1. The collection of numbers, figures, or objects gathered to give information is called

- (a) Data (b) mean (c) mode (d) median

2. In a pictograph, one symbol = 10 students. If 6 symbols represent students who like cricket, how many students like cricket?

- (a) 16 (b) 60 (c) 600 (d) 36

3. In a survey of 40 students 10 likes cricket rest of the student like hockey then how many students like hockey

- (a) 30 (b) 20 (c) 10 (d) 35

4. _____ makes the data easy to count.

- (a) Frequency (b) Data (c) Tally mark (d) Symbol

5. Arranging the data in a systematic form in the form of a table is

- (a) representation (b) tabulation (c) observation (d) None of these

6. The number of times a particular observation occurs is called

- (a) frequency (b) counting (c) tally marks (d) occurrences

7. Using tally marks, which one of the following represents the number eight?

(a) |||| ||||

(b)  

(c)   ||

(d)   |||

8. In a bar graph, space between rectangles is always .

- (a) unequal (b) increasing (c) equal (d) decreasing

9. If       stands for 120, how much does   stands for?

- (a) 120 (b) 80 (c) 60 (d) 40

10. A student collected data on the number of flowers in 5 gardens: 10, 15, 8, 12, 10. The range of this data is: (a) 5 (b) 7 (c) 10 (d) 15

MCQs (PART-2) ($10 \times 1 = 10$ marks)

11. Which of the following requires collecting data before answering?

- a. What is the capital of Rajasthan?
- b. Which fruit is liked the most by students in your class?
- c. How many days are there in a leap year?
- d. What is the national animal of India?

12. A frequency table shows that 18 students prefer football. What does the number 18 represent?

- a. Tally marks
- b. Frequency
- c. Category
- d. Scale

13. In a tally chart, the tally marks are shown as

|||| |||

How many objects are represented?

- a. 6
- b. 7
- c. 8
- d. 9

14. A pictograph uses ★ = 5 students. If a category has 6 stars, how many students does it represent?

- a. 25
- b. 30
- c. 35
- d. 40

15. A bar graph is preferred over a pictograph when

- a. The data has only two values.
- b. The amount of data is large.
- c. There are no numbers involved.
- d. Pictures are unavailable.

16. Which of the following is essential while drawing a bar graph?

- a. Bars of different widths
- b. Unequal spacing between bars
- c. Uniform width and equal spacing of bars
- d. Bars joined together

17. A bar graph uses the scale 1 unit = 20 books. A bar is 7 units high. How many books does it represent?

- a. 120
- b. 140
- c. 160
- d. 180

18. Which statement about pictographs is TRUE?

- a. Every symbol must always represent one object.
- b. Different symbols can represent different numbers according to the key.
- c. Pictographs cannot compare data.
- d. Pictographs cannot use half symbols.

19. Which type of graph is most suitable to compare the monthly rainfall of a city?

- a. Bar graph
- b. Number line
- c. Circle
- d. Line segment

20. A survey records the favourite sports of 120 students. Which is the first step before drawing a bar graph?

- a. Colour the bars.
- b. Arrange the data into categories and frequencies.
- c. Choose random heights for the bars.
- d. Draw the bars without a scale.

WORKSHEET-2

Section B: Short Answer ($10 \times 2 = 20$ marks)

1. Write 30 in tally marks.

2. If ☺ is equal to 4 persons, how many persons are represented by ☺ ☺ ☺ :

3. Complete the table

Sweets	Tally Marks	No. of Students
<i>Jalebi</i>		6
<i>Gulab jamun</i>		9
<i>Gujjiya</i>		_____
<i>Barfi</i>		_____
<i>Rasgulla</i>		_____

4. A survey was conducted on favorite sports: Football (15), Cricket (20), Basketball (10), Tennis(5). How many more students prefer Cricket than Tennis?

5. A bar graph represents the number of movies watched by students. The scale is 1 unit length = 2 movies. If a student watched 8 movies, what would be the height of the bar?

6. A survey was conducted on the number of books read by 10 students in a month:

4, 2, 5, 3, 4, 1, 5, 4, 2, 3. Arrange the data in ascending order. What is the most common number of books read?

7. A bar graph shows the population of a village over several years. The vertical axis represents the population in hundreds, and the scale is 1 unit = 500 people. If a bar is 10 units high, what is the population?

8. In a pictograph, a symbol , represents 5 balloons. To represent 28 balloons, how many symbols would you need?

9. The following data shows the marks obtained by a student in 5 subjects out of 100:

English: 85, Math: 95, Science: 80, Social Studies: 75, Hindi: 90.

If a bar graph is drawn with a scale of 1 unit length = 5 marks, what would be the height of the bars for Math and Science?

10. A bar graph has a scale of 1 unit length = 50 books. What is the total number of books represented by bars with heights of 6 units and 9 units?

Section C: Short Answer ($6 \times 3 = 18$ marks)

11. Thirty students were interviewed to find out, what they want to be in future. Their responses are as follow:

Doctor, Engineer, Doctor, Pilot, Officer, Doctor, Engineer, Doctor, Pilot, Officer,
Pilot, Engineer, Officer, Pilot, Doctor, Engineer, Pilot, Officer, Doctor, Officer,
Doctor, Pilot, Engineer, Doctor, Pilot, Officer, Doctor, Pilot, Doctor, Engineer

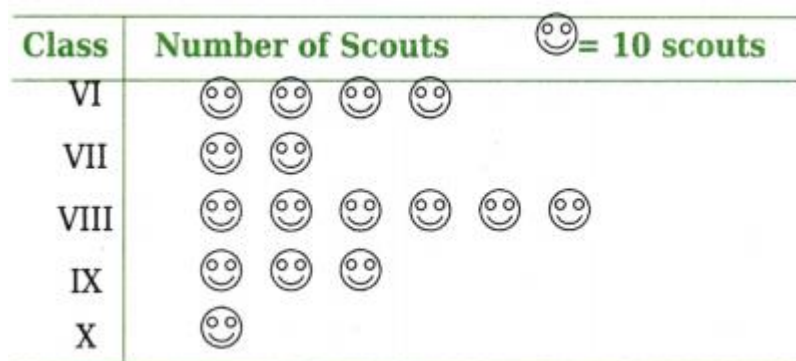
Arrange the data in a table using tally marks.

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12. Make a table and enter the following data using tally marks. 7, 8, 6, 5, 6, 7, 7, 9, 8, 10, 7, 6, 7, 8, 8, 9, 10, 5, 7, 8, 7, 6

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13. The number of scouts in a school is depicted by the following pictograph.



Observe the pictograph and answer the following questions,

(a) Which class has the minimum number of scouts?

(b) Which class has the maximum number of scouts?

(c) How many scouts are there in class VI?

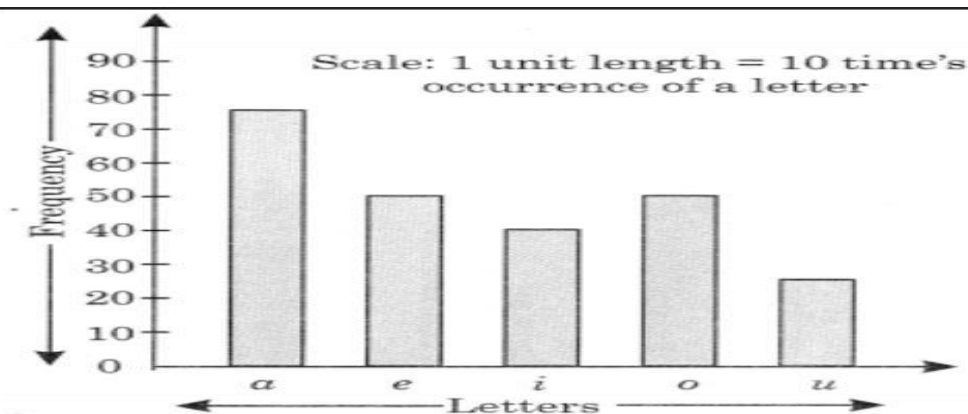
14 The number of students who joined different sports clubs in a school is as follows:

Football: 25, Cricket: 40, Basketball: 30, Tennis: 15. (a) Represent this data using tally marks in a frequency distribution table. (b) Which club has the least number of students

15. The following is the pictograph depicting the number of girls from class I to VIII 4. Which class has maximum number of girl students? 5. How many girls are there in class IV? 6. Find the ratio of girls in class I to Class V



16. The given bar graph represents the frequency of a, e, i, o, and u in a piece of English writing

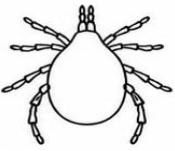
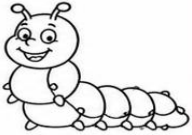
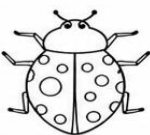
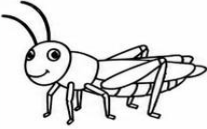


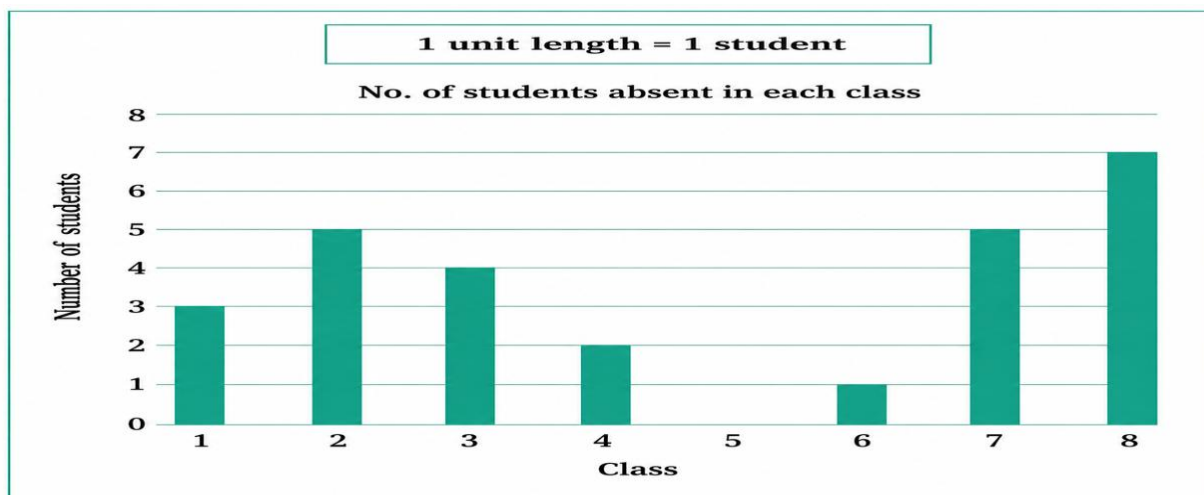
- Which letter occurred the maximum number of times?
- Which letter occurred 40 times?
- Which letter occurred less than 30 times?

Section D: Long Answer ($4 \times 5 = 20$ marks)

17. The number of visitors to a zoo on five consecutive days is recorded as: Monday: 300, Tuesday: 400, Wednesday: 250, Thursday: 500, Friday: 350. (a) Prepare a frequency distribution table for this data. (b) Draw a bar graph to represent the data, choosing a suitable scale.

18. Samantha visited a tea garden, and collected data of the insects and critters she saw there. Here is the data she collected: Help her prepare a bar graph representing this data.

				
Mites	Caterpillars	Beetles	Butterflies	Grasshoppers
6	10	5	3	2



Answer the following questions using the bar graph:

1. In Class 2, _____ students were absent that day.
2. In which class were the maximum number of students absent?
3. Which class had full attendance that day?

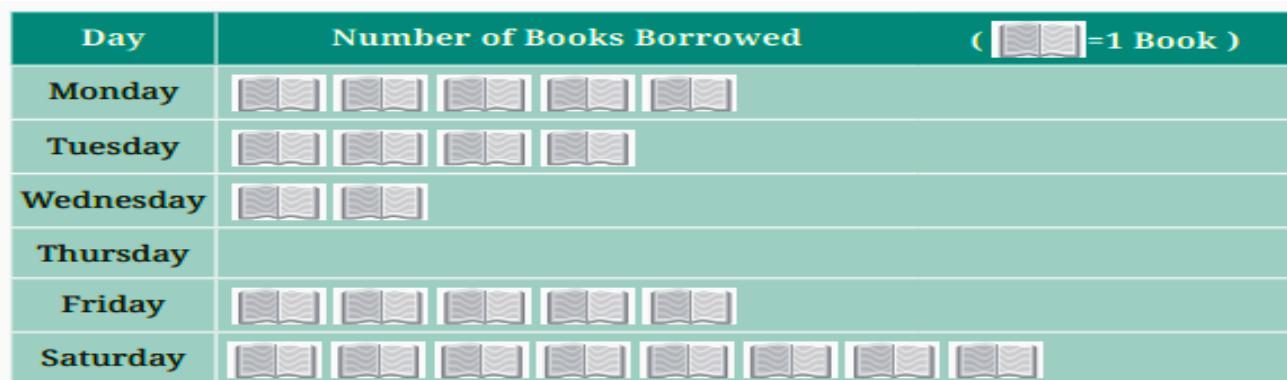
20. “What is mathematics? It is only a systematic effort of solving puzzles posed by nature”

Above given is a statement by a mathematician, read it and prepare a table as given below:

letter	a	e	i	o
No. of times found in stat.				

Case Study Based Questions (2 × 4 = 8 marks)

21. The following pictograph shows the number of books borrowed by students, in a week, from the library of Middle School, Ginnori-



- (a) On which day was the minimum number of books borrowed?
(b) What was the total number of books borrowed during the week?
(c) On which day were the maximum number of books borrowed? What may be the possible reason?

22 The following data represents the weekly wages (in ₹) of 16 workers in a factory
850, 800, 750, 900, 750, 800, 950, 900, 950, 750, 800, 850, 800, 850, 900, 950.

- (a) How many workers are getting less than ₹ 850 per week?
(b) How many workers are getting more than ₹ 800 per week?

Self Assessment:

I understood all the concepts ☐ Yes ☐ No

I need more practice ☐ Yes ☐ No

Name of Concepts having doubts/Not Cleared: _____

Parent's Assessment:

My ward understood all the concepts ☐ Yes ☐ No

He/She need more practice ☐ Yes ☐ No

Name of Concepts having doubts/Not Cleared: _____

Signature of Parent:

Teacher's Assessment

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Answers of Worksheet 1:

Q.No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ans	a	b	a	c	b	a	d	c	d	b	b	b	c	b	b	c
Q.No.	17	18	19	20												
Ans	b	b	a	b												

Answers of Worksheet 2:

Q.No.	1	2	3	4	5	6	7	8
Ans		12	13,3,7	15	4UNITS	4	5000	5 complete symbols and a partial
Q.No.	9	10	11	12	13	14	15	16
Ans	9, 16	750 books	Correct table	Correct table	X, viii 40	Tennis	a) class I b)14 girls 12:5	a, i, u
Q.No.	17	18	19	20	21	22		
Ans	Correct table and bar graph	Correct table and bar graph c	5,8,5		Thursday, 24, saturday	7,9		

Ans20

letter	a	e	i	o
No. of times found in above statement	4	6	6	5