



The number of students who take mid-day meal in a week in one of the primary school is as follows-

Table

Sr. No.	Day	Number of students taking mid-day meal
1.	Monday	120
2.	Tuesday	110
3.	Wednesday	132
4.	Thursday	103
5.	Friday	98
6.	Saturday	115

Teacher — Sahil, on which day maximum number of students took the mid-day meal?

Sahil — Maximum 132 children took the mid-day meal on Wednesday.

Teacher— Well done! Mahesh, on which day the number of students taking mid-day meal was the minimum ?

Mahesh — On Friday, only 98 students took the mid-day meal, which is the minimum.

Teacher— Meena how did we get this information?

Meena — We got this information by reading the table and comparing the numbers.

The data is also presented in the form of pictures to understand it more easily. It is also represented by bar diagram or pictograph.



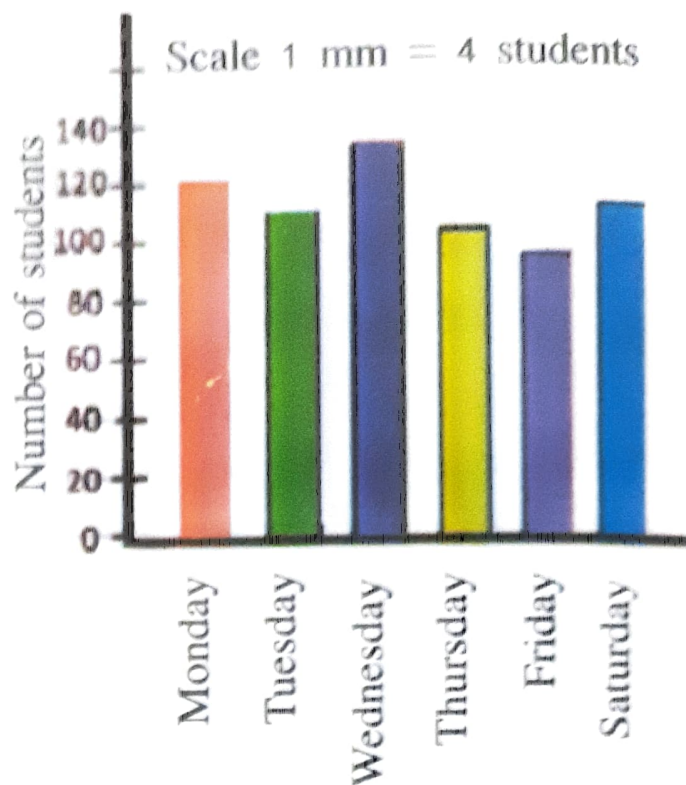
Let's see—

Teacher—Radhika, look at the bar diagram and tell the days of the week in decreasing order of the number of students.

Radhika—Number of students: on Wednesday > on Monday > on Saturday > on Tuesday > on Thursday > on Friday.

Teacher—Well done! How did you tell it so quickly?

Radhika—By seeing the height of the column in the bar diagram.



(Bar Diagram)

We have seen —

- The data given in the form of table can also be represented in the form of column or bar diagram.
- Column or bar diagrams are rectangular bars of equal width with equal space between them. They can easily be depicted on the graph paper.

In the bar diagram, we observe that the bar for Wednesday is the heighest. It means that the number of students having mid-day meal is maximum on Wednesday.

Let's understand this too —

Look at the table to know the quantity of milk given by Devesh's cow last week —

Day	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Quantity of milk (in litre)	5	6	5	4	7	6	5

Teacher should make the students practise bar diagrams and pictographs with the help of different examples.



Let's represent it by the pictograph also—

Teacher— Sukhwinder, on which day Devesh's cow gave maximum quantity of milk?

Sukhwinder—On Thursday, 7 litres.

Teacher —How did you know?

Sukhwinder—There are maximum number of cans against Thursday. They are seven in numbers

Teacher — It seems that you could know even before counting that maximum quantity of milk was obtained on Thursday.

Sukhwinder— Yes!

Teacher — Well done! Sahil, on which days the cow gave 5 litre milk.

Sahil — Sunday, Tuesday and Saturday.

Teacher— Excellent! How did you know?

Sahil — By counting the number of cans in the picture.

We saw —

- Depicting the data given in the table in the form of symbolic picture is called pictograph.
- The analysis of the data become easier by bar diagram and pictograph.

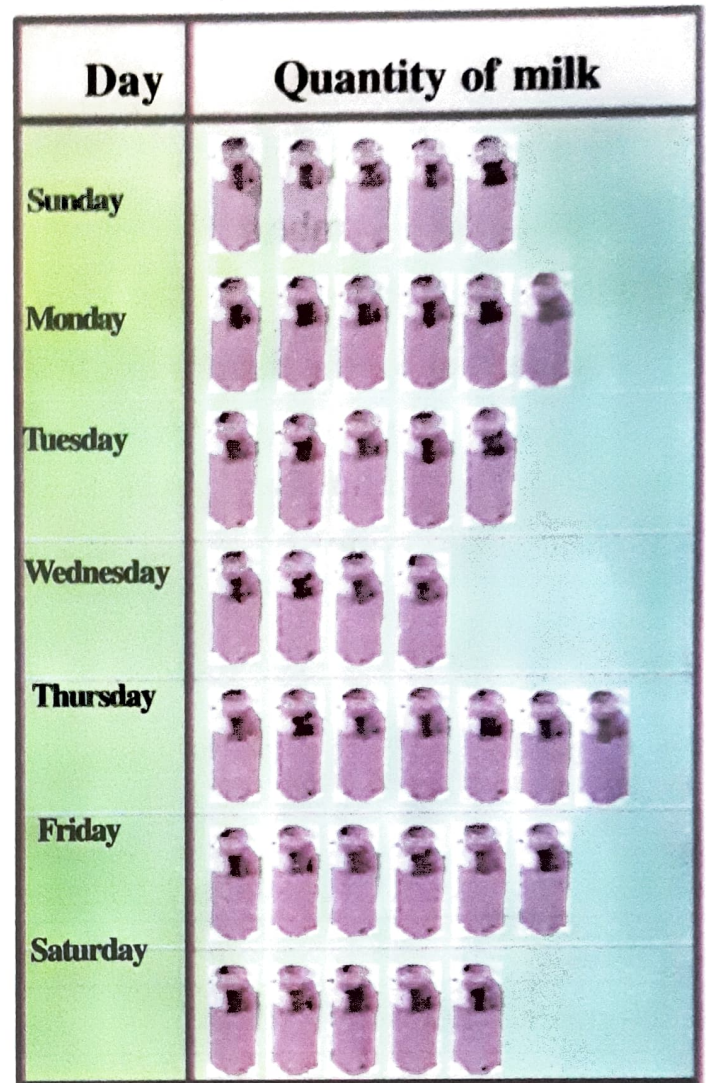


Do it yourself—

The marks secured by Moti in different subjects in the half yearly examination are given in following table and bar diagram.

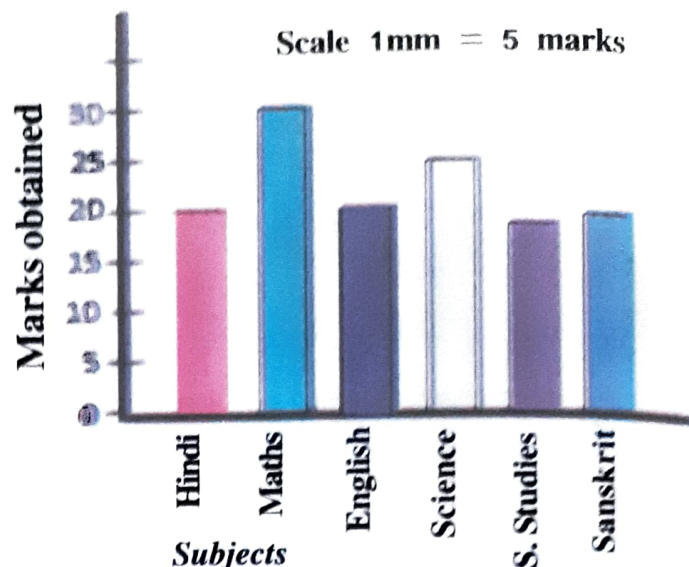
Subject	Hindi	Maths	English	Science	Social Study	Sanskrit
Marks Obtained	20	28	20	25	18	20

Scale 1 Litre =



Answer the following questions —

1. In which subject did Moti secure the maximum marks ?
2. In which subjects did Moti score equal marks ?
3. How many more marks has Moti obtained in Maths than in English ?



We have learnt

- Importance of data in our day to day life.
- Presenting our different activities in the form of data.
- Drawing a pictograph and a bar diagram of the data collected.

Exercise

1. The number of vehicles in any village are given in the following table-

Vehicle	Bicycle	Scooter	Motorbike	Car	Tractor	Bus
Number	30	10	25	6	12	3

represent it in the form of bar diagram.

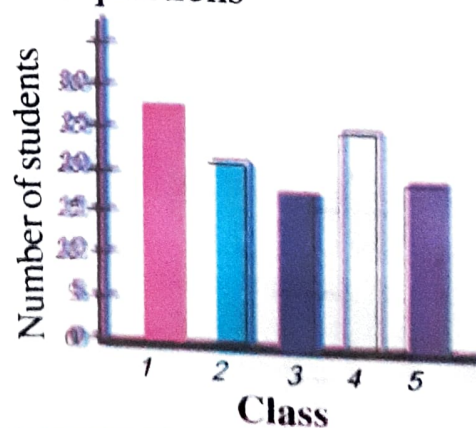
2. The number of books available to 5 students in any class are given below-

Name	Ramesh	Divakar	Sushma	Manjri	Rubiya
Number of books	4	6	5	5	7

represent it in the form of pictograph.

3. Look at the given bar diagram and answer the questions—

- a. Which class has the maximum number of students ?
- b. Which class has the minimum number of students ?
- d. Arrange the classes in increasing order on the basis of the number of students.





Square

Method of Ancient Indian Mathematics

By this method we find the square of two numbers.

For example - Find the square of 41.

First step— First of all, we write the square of tens digit on the extreme left.

$$4 \times 4$$

$$4 \times 1$$

$$1 \times 1$$

Second step — In the middle part we write the product of ones and tens digit twice and add them together.

$$4 \times 1$$

$$16$$

$$8$$

$$1$$

$$\text{or } 1681$$

Third step— At the right most position we write the square of ones digit.

$$\text{Hence, } 41^2 = 1681$$

Identify the order (Pattern) —

444	555	666	777
30500	31000	31500	32000

Understand the order and complete the series —

3333	4444	5555	
5000	6000	7000	
30001	30002		
40000	41000	42000	
05000	70000		80000





How much have we learnt — 5



1. Simplify —

- (a) 8078×307 (b) 2891×269 (c) $8490249 \div 679$
 (d) $9576081 + 77896 + 891279$ (e) $9054000 - 7598796$

2. Convert —

- (a) 0.379 in fraction (b) $17\frac{3}{9}$ in decimal
 (c) $\frac{1}{7}$ and 0.47 in % (d) 3.6 hectometre into metres
 (e) 157600 mm into km (f) 3 hours into minutes
 (g) 2.5 are into square metres (h) 5.4 square metres into sq cm

3. Take a shoebox and measure its length, breadth and height. Find its perimeter and volume.



4. Out of one lakh voters, 75500 voters cast their votes. What is the percentage of voting ?

5. Find the volume of the following —

- (a) The length of one side of a cube is 2.5 cm.
 (b) The length of cuboid is 1.25m, breadth 0.75 m and height is 35 cm.

6. A water tank is 3 m long, 2 m broad and 1.5 m deep. How many litres of water can the water tank contain? When 1 cubic metre = 1000 litres

7. The cost of 6 soap cakes is ₹ 81. How much money will be required to buy 27 such soap cakes ?

8. The percentage details of average attendance in one month of all the classes in a school has been given. Represent the data in the form of bar diagram -

Class —	1	2	3	4	5
Attendance (%)—	80	90	100	95	95



9. Complete the block puzzle –

				j			n	
	l							
		m		d				c
i								
						f		
				o		e	b	
h								
			a					
k							g	

Left to right

- greatest 6 digit number
- $144 \div 12$
- greatest one digit even number
- $84529 - 62101$
- volume of a cube which has 8 metres long side
- 15% of 1500
- the degree of a right angle
- L.C.M. of 12 and 5
- The numbers of hours in a week
- 214×132
- 813×3

Top to bottom

- greatest 2 digit number
- $526 + 131 + 442$
- $2242810 + 6210080$
- $312 \div 13$
- $500 + 20 + 9$
- a number, the sum of whose digits is 7
- area of rectangle whose length is 56 m and breadth is 12 m
- 462×750
- the sum of the three angles of a triangle
- 221×2
- area of a square, whose one side is 13 m in length