

12

Data Handling

The parents of Soha are shopping for Soha's birthday. They need lot of things like balloons, cake, candles, caps, ice-creams, sandwiches, patties and juices. They make a list so that they don't forget anything !



Item	Number	Item	Number
Candles	3 packets	Sandwiches	19
cake	1	Return gifts	10
Balloons	9	Gulab jamuns	16
Ice-creams	16	Juices	15
Caps	8	Patties	18

A list helps us to organise information about things.

The information in a list can be in the form of names and numbers.

Such information is called **data**.

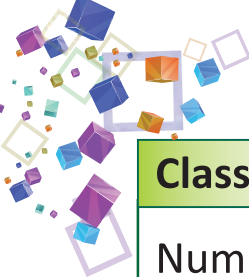


More About Lists

Sometimes, we can make a list with more than two columns to show more information.

Example I : The list shows the number of students present and absent in each class on a certain day.





Class	Class I	Class II	Class III	Class IV	Class V	Total
Number of students	48	56	32	35	38
Students present	39	52	30	34	38
Students absent	9	4

Fill in the blanks in the previous list. Then answer the following questions.

- If the school consists of these five classes, how many students are there in the school ?
- Which class has the most number of students ?
- How many students were absent in all on that day ?
- In which class were all students present ?

Pictograph

Data can be shown with the help of pictures. The pictorial representation of data is called a **pictograph**.

Example II : In a school, the Children of Class 3 A were asked to name their favourite food. Use the information to make a pictograph.

Favourite Food	Sandwich	Rajma-rice	Burger	Dosa	Noodles
Number of children	8	7	11	5	9

The above information can be shown in the form of a pictograph.



Facts to Know

- A pictograph will always have a title. It may also have a note explaining the picture.





Title →

FAVOURITE FOOD OF STUDENTS OF CLASS 3 A	
Sandwich	
Rajma-rice	
Burger	
Dosa	
Noodles	
Each stands for 1 child.	

Answer these questions with the help of the above pictograph.

- What does stand for?1 child.....
- How many children are there in Class 3 A?
- Which food is liked by the least number of children?
- What does the pictograph show?
- Which food is liked by most of the children?



Exercise 12.1

1. Use this pictograph to answer the questions that follow.

Apples sold in September	
1st week	
2nd week	
3rd week	
4th week	
One represents 1 kg of apples.	

- How many more apples were sold in the 3rd week than in the 1st week?
- How many kg of apples were sold in the month of September?
- In which week were the maximum number of apples sold?





2. Use this pictograph to answer the questions that follow.



- What does represent ?
- On which day were the least number of books issued ?
- On which day were the most number of books issued ?
- What information does the pictograph give ?
- What was the total number of books issued during the week ?

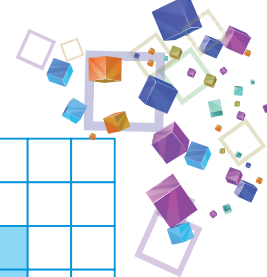


Bar Graph

Information can also be shown in **bar graphs**. A bar graph has bars of different height.

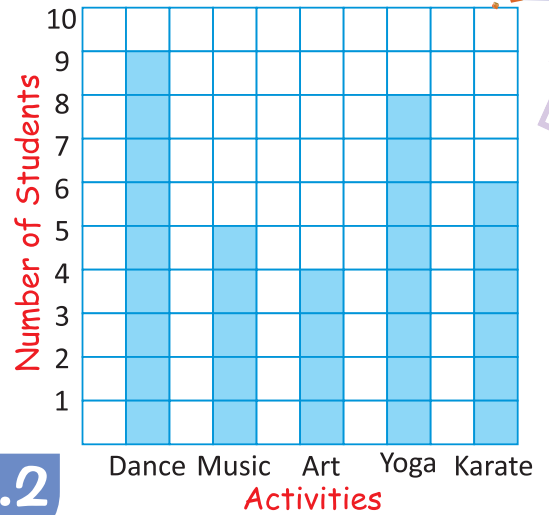
Example III : The following is a list of some activities chosen by some students under the CCE pattern. Show this information with the help of a bar graph.

Activities	Dance	Music	Art	Yoga	Karate
Number of students	9	5	4	8	6



Study the bar graph and fill in the blanks.

- The least students have chosen
- students have chosen Art and Yoga.
- Most students have chosen

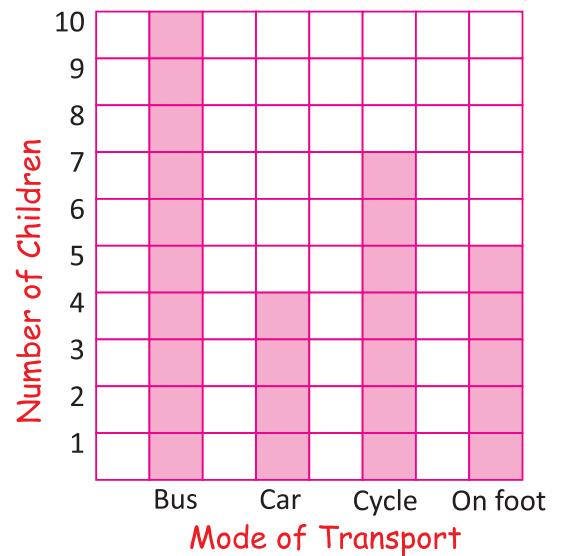


Exercise 12.2

1. Study this bar graph which shows the mode of transport used by Students to go to school.

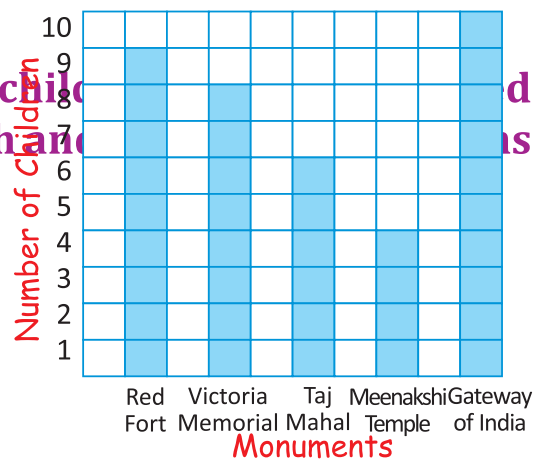
Answer the questions that follow.

- How many students walk to go to school ?
.....
- Which is the most popular mode of transport ?
.....
- How many students use cycle to go to school ?
.....
- Which mode of transport is the least used ?
.....



2. This bar graph shows the number of children who visited various monuments. Study the bar graph and answer the questions that follow.

- Which monument is visited by the most number of children ?
.....
- How many children visited Red Fort ?
.....
- Which monument is visited by the least number of children ?
.....



Points to Remember

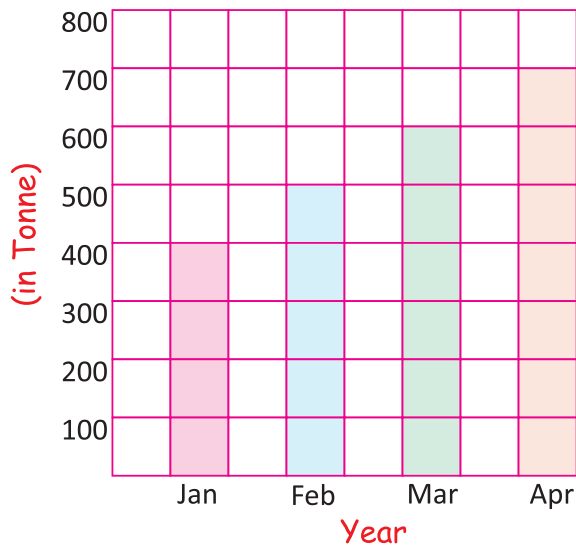
- ❖ The information in a list can be in the form of names and numbers.
- ❖ Data can be represented with the help of a pictograph.
- ❖ A pictograph will always have a title.
- ❖ A bar graph has a bar of different height.



EXERCISE

1. Multiple Choice Questions (MCQs)

Tick (✓) the correct option.



a. In which month, production was 400 Tonnes ?

- (i) Feb (ii) Jan (iii) Mar (iv) Apr

b. How much production was in month of Feb and March ?

- (i) 300 Tonne (ii) 400 Tonne
 (iii) 900 Tonne (iv) 1100 Tonne

c. In bar graph, which month has least production ?

- (i) Jan (ii) Feb (iii) Mar (iv) Apr

d. Which month has maximum production ?

- (i) Apr (ii) Mar (iii) Feb (iv) Jan





e. In which month, production was 500 Tonnes ?

(i) Jan (ii) Feb (iii) Mar (iv) Apr

2. Tanu asked the boys who lived in her building. "What are their favourite TV channels?" This is what she found.

Channels	Comedy	Sports	Cartoons	Adventure
No. of children	8	6	4	6

Show this information on the pictograph and answer the questions given below.

- a. Which is the least of popular channel?
- b. Which is the most popular channel?
- c. Which two types of channels are equally popular?
- d. How many boys did Tanu ask in all?

3. Use the given pictograph to answer the following questions. Make a bar graph from this pictograph.

Favourite colours in a class	
Green	
Orange	
Red	
Pink	
Blue	
Yellow	
Each stands for 2 girls	

- a. What does stands for?
- b. Which colour is the most popular?
- c. How many girls like orange?
- d. Which colour is not liked by most of girls?
- e. How many girls are there in the class?



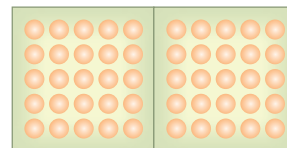


HOT

Why do we make a list or table to store a large amount of data?

Lab Activity

Objective : To understand the concept of addition with :
Representing data on a pictograph.



Materials Required : Glue, bindis of small size and drawing sheet

Process :

- ❖ Record the number of children in the class having their birthdays in the different months of the year. The total should be equal to the number of children in the class.

Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of students												

- ❖ Decide the title of the pictograph.
- ❖ Decide the symbol (you may use bindis).
- ❖ Decide the number of students each symbol should represent.
- ❖ Find out the month in which the least number of students have their birthdays and the month in which the most students have their birthdays.

TITLE _____	
Jan	○
Feb	
Mar	
Apr	
May	
Jun	
Jul	
Aug	
Sept	
Oct	
Nov	
Dec	
Each ○ Represents _____ students.	