MONTH : JANUARY

SESSION : 11

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 21

CHAPTER NAME : DATA HANDLING

SUB-TOPIC : INTRODUCTION PICTOGRAPH

EXERCISE 21 A

LEARNING OBJECTIVE :

The learners will develop the skills to collect, organise, display, analyse and interpret data.
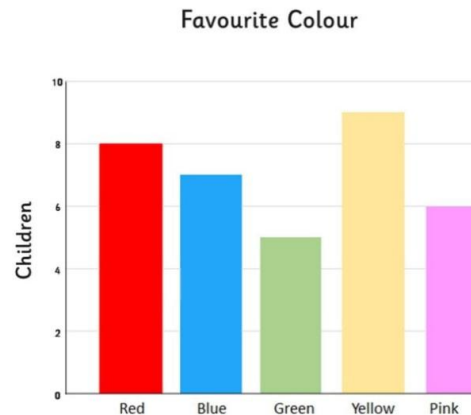
DATA HANDLING

Information collected in the form of numerical figures is called data.

Data can be represented in four different ways:

1. Pictograph

Small Towns	Number of illiterate children
Melrose	
Marengo	
Midway	
Parral	
Rushville	

2. Bar graph

Favourite Colour

DATA HANDLING

Favorite Type of Movie
SciFi: 4 (20%)
Comedy: 4 (20%)
Drama: 1 (5%)
Action: 5 (25%)
Romance: 6 (30%)

3. Pie chart

4. Line graph

Wildlife Population
Bears   Dolphins   Whales
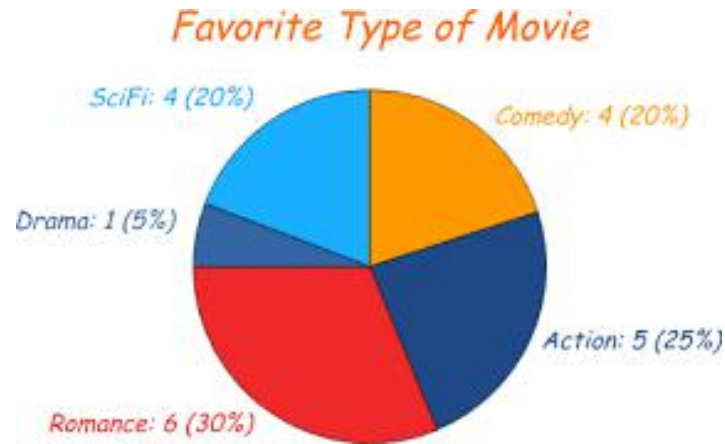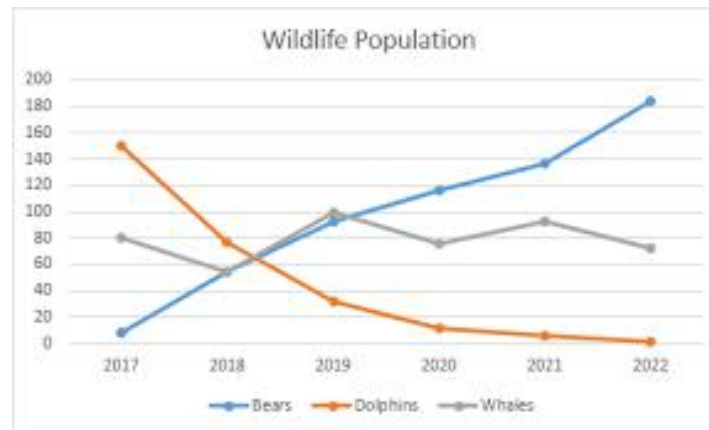
PICTOGRAPH

In a pictograph, a symbol is used to represent one or more objects of the data according to the scale / key selected.

EXAMPLE 1

The pictograph given below shows the number of visitors who visited a planetarium from Monday to Friday.

Monday	Tuesday	Wednesday	Thursday	Friday
2,000	2,200	1,800	2,400	3,000

Scale = ✡ = 400 persons

△ = 200 persons

Day	Visitors to the planetarium
Monday	✡ ✡ ✡ ✡ ✡
Tuesday	✡ ✡ ✡ ✡ ✡ △
Wednesday	✡ ✡ ✡ ✡ △
Thursday	✡ ✡ ✡ ✡ ✡ ✡
Friday	✡ ✡ ✡ ✡ ✡ ✡ ✡ △

Answer the following questions :

(a) On which day did the maximum number of visitors visit the planetarium and what was the number ?

(b) On which day did the least number of visitors visit the planetarium and what was the number ?

(c) How many visitors visited the planetarium during the week ?

ANSWERS.

a) On Friday and 3000 visitors.

b) On Wednesday and 1800 visitors.

c) It's 11, 400 people.

Data Handling

By: Rithik Kapoor

1 The arrival of passengers in different time intervals on a particular day at a Railway Station is depicted in the pictograph given below.

(a) Find out the peak hours.

(b) In which time interval was the arrival of passengers the least ?

(c) In which time interval was the arrival of passengers less than 8000 ?

(d) What is the difference between the maximum and minimum number of passengers arrived ?

(e) How many passengers arrived on that day ?

Time interval (Hours)	Number of passengers arrived
00-04	🧍🧍🧍🧍🧍
04-08	🧍🧍🧍🧍🧍🧍🧍🧍🧍🧍🧍🧍
08-12	🧍🧍🧍🧍🧍🧍🧍🧍🧍🧍
12-16	🧍🧍🧍🧍🧍🧍🧍🧍
16-20	🧍🧍🧍🧍🧍🧍🧍🧍🧍
20-24	🧍🧍🧍🧍🧍🧍🧍

Scale = 🧍 1000 persons
      = 500 persons

ANS.

a. The peak hours were from 04 : 00 hours to 08 : 00 hours.

b. From 00 : 00 hours to 04 : 00 hours the passengers arrival was the least.

c. From **00:00 hour to 04 : 00** hours and **20 :00 hours to 24 :00**

hours the   arrival of passengers is less than 8000.

d. The difference between the maximum and minimum passengers arrival =

12000 – 5000 = 7000

e. Total passengers arrived that day = **52, 000.**

2 The pictograph given below gives the weekly sale of milk from a Mother Dairy outlet in Delhi.

(a) Calculate the total milk sold during the week. If it costs ₹ 32 per litre, calculate the weekly sale.

(b) On which day was the sale maximum ?

(c) What was the sale on Wednesday ?

(d) On which two days was the sale minimum ?

Days	Sales
Sunday	🥛 🥛 🥛 🥛 🥛
Monday	🥛 🥛 🥛 🥛
Tuesday	🥛 🥛 🥛 ᵢ
Wednesday	🥛 🥛 🥛 🥛 ᵢ
Thursday	🥛 🥛 🥛 🥛 🥛 🥛
Friday	🥛 🥛 🥛 ᵢ
Saturday	🥛 🥛 🥛 🥛

Scale = 🥛 100 litres
= ᵢ 50 litres

ANS.

a) Total milk sold in the week =

500 L + 400 L + 350 L + 450 L + 600 L + 350 L + 400 L = **3050 L**

Cost of 1 L of milk = ₹ 32

Cost of 3050 L of milk = 3050 x 32 = **₹ 97,600**

$$\begin{array}{r} 3050 \\ \times \quad 32 \\ \hline 6100 \\ 9150 \\ \hline \textbf{97600} \end{array}$$

b) On **Thursday** the sale was maximum.

c) The sale on Wednesday =   **450 L**

d) On **Tuesday** and **Friday** the sale was minimum.

Complete Exercise 21 A in the notebook.

Students are able:

• To collect, organise, display, analyse and interpret data.

THANKING YOU
ODM EDUCATIONAL GROUP