22. Constructing and Interpreting Bar Graphs

Exercise 22

1. Question

The marks of a student in different subjects are given below:

Subject	English	Hindi	Mathematics	Science	Social science
Marks	72	63	80	56	65

Draw a bar graph from the above information.

Answer



2. Question

The following table shows the year-wise strength of a school.

Year	2010-11	2011-12	2012-13	2013-14	2014-15
No. of students	950	1125	1400	1750	1900

Represent the above data by a bar graph.

Answer



3. Question

The following table shows the favorite sports of 300 students of a school.

Sports	Cricket	Badminton	Football	Tennis	Swimming
No. of students	85	60	55	35	65

Represent the above data by a bar graph.



The air distances of four cities from Delhi (in km) are given below:

City	Mumbai	Kolkata	Hyderabad	Chennai
Distance from Delhi (in km)	1100	1340	1220	1700

Draw a bar graph to represent the above data.



The following table shows the life expectancy (average age to which people live) in various countries in a particular year.

Country	India	Japan	Britain	Ethiopia	Cambodia
Life expectancy (in years)	65	80	75	50	45

Represent the above data by a bar graph.



Various modes of transport used by 2150 students of a school are given below:

School bus	Private bus	Scooter	Bicycle	By foot
750	460	130	370	440

Draw a bar graph to represent the above data.



The following table shows the number of motorcycles produced by a company during six consecutive years.

2009	2010	2011	2012	2013	2014
14000	16000	18500	21000	24000	30000

Draw a bar graph to represent the above data.



The present population (in lakhs) of six Indian states is given below:

State	Population (in lakhs)
Bihar	1040
Chhattisgarh	260
Jharkhand	330
Madhya Pradesh	720
West Bengal	910
Rajasthan	690

Represent the above data by a bar graph.



There are 1120 creatures in zoo as per list given below :

Beast animals	Other land animals	Water animals	Birds	Reptiles
220	410	165	190	135

Represent the above data by a bar graph.



The following table shows the export earnings of India (in thousand crore rupees) during five consecutive years.

Year	2010-	2011-	2012-	2013-	2014-
	11	12	13	14	15
Export (in thousand crore rupees)	540	600	750	950	1100

Represent the above data by a bar graph.



The following data shows India's total population (in millions) from 1961 to 2011.

Year	1961	1971	1981	1991	2001	2011
Population (in millions)	360	420	540	680	1020	1200

Represent the above data by a bar graph.



In a survey of 100 families of a village, the number of members in each family was recorded, as shown by the bar graph given below:



Read the bar graph carefully and answer the following questions.

- (i) What does the bar graph show?
- (ii) How many families have less than five members?
- (iii) How many families have more than three members?
- (iv) How many families have two children?

(iv)How many families have two members?

Answer

(i) The bar graph shows the number of members in each of the 100 families of a village.

(ii) 90

No. of Families less than five members

= 5 + 30 + 55

= 90

(iii) 65

No. of families having more than three members

= 55 + 10

= 65

(iv) 5

No. of Families having two members

= 5

13. Question

Look at the bar graph given below:



Read the above bar graph carefully and answer the questions given below.

- (i) What does the bar graph show?
- (ii) In which subject is the student very poor?
- (iii) If maximum marks in each subject be 100, what is the average of his marks?
- (iv) On the basis of marks obtained, find the subject in which the student has special interest.

Answer

(i) The given bar graph shows the marks obtained by a student in an examination in each of the five subjects.

This bar graph shows the marks obtained by student in five subjects.

(ii) English

English, because he has scored the less mark in English as compared to other subjects.

(iii) 54

Average Marks is

$$=\frac{50+80+30+60+45}{5}$$

= 265/5

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= 53
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(iv) mathematics

Student is interested in Mathematics. He has scored the maximum marks in mathematics i.e. 80.

14. Question

Given below is a bar graph showing the heights of five mountain peaks.



Read the bar graph carefully and answer the following questions.

(i) Name the highest peak and mention its height.

(ii) What is the ratio between the heights of the lowest and the highest peaks?

(iii) Arrange the heights of the given peaks in an ascending order.

(iv) Which peaks differ in height by 600 metres?

Answer

(i) Mount Everest, 8800 m

Mount Everest is the highest peak and its height is 8800 meters.

(ii) 15 : 22

Annapurna is the lowest peak and its height is 6000 meters.

Mount Everest is the highest peak and its height is 8800 meters.

Ratio between them is

= 6000: 8800

= 15: 22

(iii) 6000 m < 7500 m < 8000 m < 8200 m < 8800 m

Heights of given peaks in ascending order will be as follows:

6000 meters < 7500 meters < 8000 meters < 8200 meters < 8800 meters

(iv) Mount Everest and Kanchenjunga

Mount Everest is the highest peak and its height is 8800 meters.

Kanchenjunga is second highest peak and its height is 8200 meters.

These two peaks differ in height by 600 meters.