CHAPTER- 1

Let's Do A Survey

You may not find answers to certain questions in your textbook.But they do have answers.For eg.How many families and how many people live in your village?

You must be thinking why is it necessary to know the number of families and people living in your village. Have you ever thought of the different needs people have, eg. water, electricity, food, clothing, material for construction of houses, schools, hospitals etc. Greater the population, greater the needs. This would lead to scarcity of resources. It is not just enough to know the needs but it is important to find ways and means to fulfill it. Such information creates a base for solving many problems. To collect such information we carry out is a survey.

Many times your teacher also carries out a survey. Find out from them, the kinds of survey they do?

&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&

Let's Find out

To find answers to such questions, let us carry out a survey. There are certain things that you already know, but with the help of a survey you'll get more information.

How to carry out a survey?

Firstly, divide yourself in groups of two's. Both partners should either be neighbours or live in the neighbourhood.

Each group should visit at least 8-10 houses in a colony or a lane and collect information. At least one group must visit a colony.

With the help of a survey, collect the following information

Table-1

S. No.	Name of the head of the family	His profession	No. of people in the family	Kuccha or a pucca house	People in the family use wood/gas/coal/kerosene/ cow dung cakes as fuel
1.					
2.					
3.					
4.					
5.					

Now look at the table and answer the question :

How many families are there in your locality?

How many houses are there in your locality?

How many kuccha and pucca houses are there in your locality?

How many families in your locality use wood? How many use cow dung cakes as fuel?

How many families use cooking gas?

How many families use kerosene as fuel?

.....

Look at the table and find out what is the major occupation of the people in you locality ?

.....

Similarly, you can conduct a survey to collect information of many such things.

Survey of Crops

Table - 2

Find out the different crops grown in your area? When is it sown and rcaped/cut?

Name of the crop	Time of sowing	Time of Reaping
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

On the basis of the survey conducted, answer the following questions-

Name the crops sown during monsoons.

How are seeds, leaves etc. obtained from these crops and how are they useful ?

Name the crops sown after the monsoons.

Survey on Pedestrians

One day, at a city crossing, Ramu and Iqbal counted the number of pedestrians. The survey was carried out from 4-5 in the evening. The number of pedestrians counted is given below. Counting was done like this- They would put a ″ / ″ sign for one pedestrian passing by. For four they put ″ //// ″ this sign. For the fifth pedestrian, they drew a vertical line across it ″ 𝍸 ″. Such signs are called tallies. eg. for 13 pedestrians, the tally sign would be- ″ //// 𝍸 𝍸 /// ″.

Table -3

Area	Women	Men	Total
1. From clock tower crossing to Victory pillar	63	135	198
2. From clock tower crossing to Moti Garden Crossing	52	203	255
3. From clock tower crossing to Railway station	09	196	205
4. From clock tower crossing to Teli Bandha crossing	60	227	287
5. From clock tower crossing to Gol Bazar	120	254	374

Looking at the table tell-

Which area has the least number of pedestrians/ What could have been the reasons? Discuss.

Which area has the highest number of pedestrians?

In which area did you find maximum number of female pedestrians ?

What facilities should be provided to pedestrians on a crowded road so that they can walk safely? Give suggestions.

Survey regarding pedestrians with the help of your teacher.

Representation of the data through sketches.

During your survey, you have seen that you have collected many data related to the survey which you have shown in table-3. This data can also be represented through sketches. Here we will deal with bar diagrams and pie charts.

Bar chart

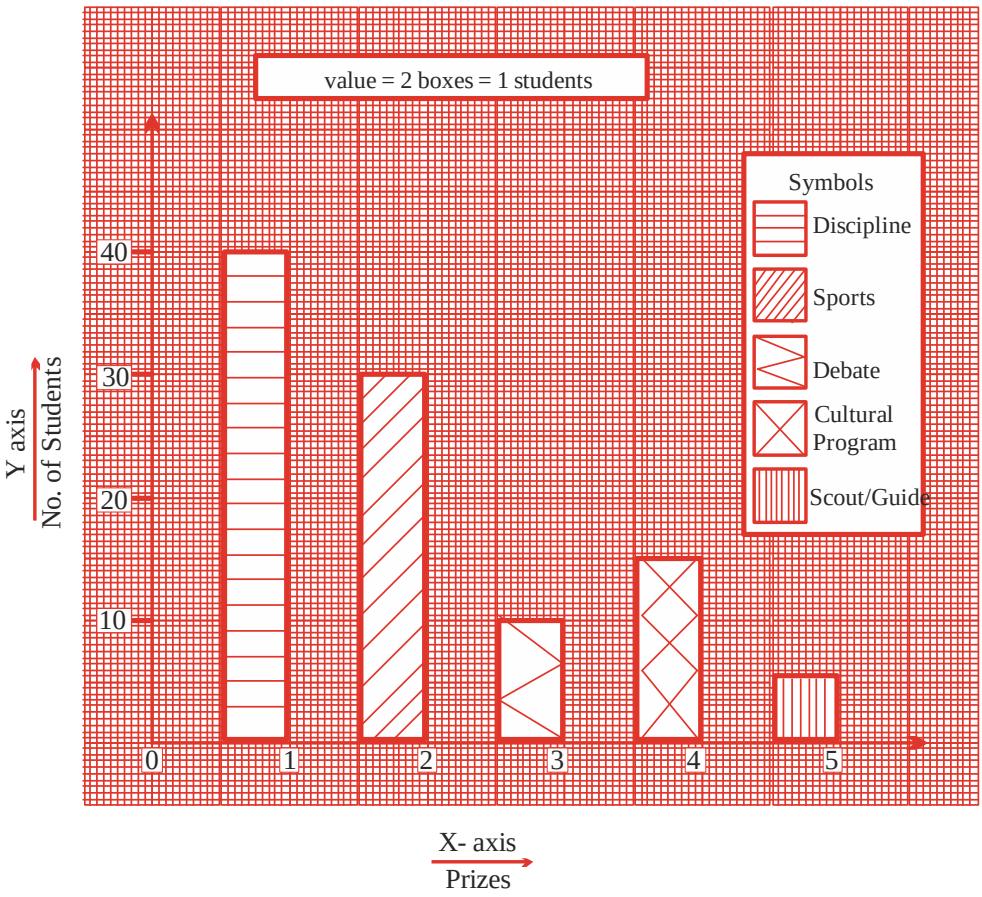
This is made on a graph paper. Look at the picture given below. You see it is made on a graph paper. It has two axis. The x-axis line is horizontal and the y-axis line which is vertical. X-axis is always greater than y-axis. Their ratio can be 4:3,5:4 or 6:4. We find standing bars of y-axis on x-axis. All these bars have the same width and are at equal distances on the x-axis. To indicate data through bar diagram or bar chart we must determine the size value. Here one example of data is shown through bar chart.

Example - Students of class V have been given prizes in different categories which is shown below.

S.N.	Prizes for	No. of students who received the prizes
1	Discipline	40
2	Sports	30
3	Debate	10
4	Cultural Program	15
5	Scout/Guide	5

In the figure the prizes are represented on x axis and the number of students receiving the prize is on y-axis. The size is determined as -[2 boxes = 1 student]

Graph - Bar chart



Pie charts -

Pie chart is another form of representing data. When the data is given in percentage we can easily represent it through pie chart. There are 360 degrees in a circle. Here 3600 is taken as equal to 100%. To make a pie chart the value of percentage is to be changed in to degrees. Come we will understand this with an example.

The result of Primary Education Certificate examination is as follows

S.N.	Class/ Grade	Percentage of students passed
1	1st class (A Grade)	20%
2	2nd Class (B Grade)	50%
3	3rd Class (C Grade)	30%

At first we will change the percentage of the students passed in to degrees,

Formula for Changing the value of percentage is - $\frac{360}{100} \times$ percentege

As $100\% = 360^{o}$

So $20\% = \frac{360}{100} \times 20$

$= 72^{o}$

in the same way

$50\% = \frac{360}{100} \times 50$

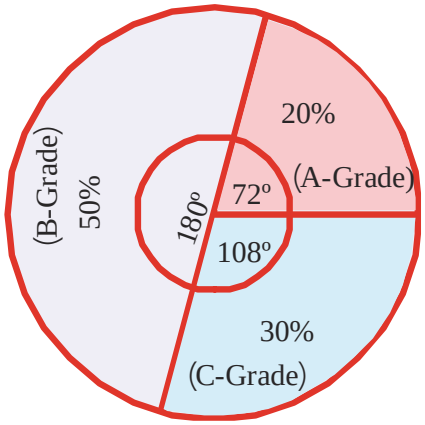
$= 180^{o}$

$30\% = \frac{360}{100} \times 30$

$= 108^{o}$

After changing the percentage to degrees, we draw a circle according to the available space.

We draw a circle which is clear on the given space and looks good. Now we draw lines measuring the degrees as per the values calculated.



Represent the data given below in a pie chart. Students of class 5 took part in the following games -

Kabadhi	-	20%
Cricket	-	30%
KhoKho	-	40%
Badminton	-	10%

What have we learnt?

Oral

1.Why is the survey done?

Written

1. While conducting a survey, what are the things to be kept in mind?
2. What information can be inferred with the help of family survey?
3. Draw tallies for 17, 25, and 10.

Find Around you

1. Apart from the surveys mentioned in the book, find out some other surveys carried out in your village.

2. Hobbies of the students of class-5 are as given below.

Singing	40 students
Reading	30 students
Acting	10 students
Gardening	20 students

Represent this data through a bar diagram or bar chart.