USES OF DATA

Inter School Sports festival with selection camp.

There is a bustle environment in Arunima's school. In the first week of February, 10 school participated in the inter school sports festival held at their school.
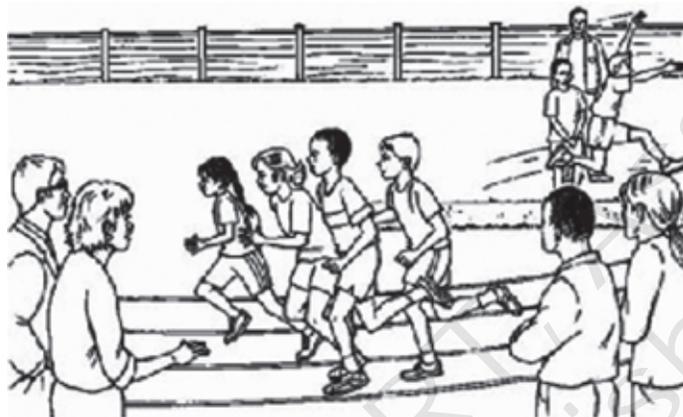
✭ The outdoor sports incharge prepared the following table of running race competition for five schools using tally marks.

Name of the schools	Boys/ Girls	Tally Marks	Total	Meaning of Tally Marks
Parijat L.P. School	Boys	⬚ ⬚ ⬚	34	⎮ --- 1
	Girls	⬚ ⬚ ⬚ ⬚		⎣ --- 2
Gyanam L.P. School	Boys	⬚ ⬚ ⬚ ⬚ ⬚ ⬚	53	
	Girls	⬚ ⬚ ⬚ ⬚ ⬚		⊔ --- 3
Bikash L.P. School	Boys	⬚ ⬚ ⬚ ⬚ ⎣	42	▢ --- 4
	Girls	⬚ ⬚ ⬚ ⬚		
Arunoday L.P. School	Boys	⬚ ⬚ ⬚ ⊔	32	◹ --- 5
	Girls	⬚ ⬚ ▢		
Saisab L.P. School	Boys	⬚ ⬚ ⬚ ⎮	38	
	Girls	⬚ ⬚ ⬚ ⬚ ⎣		

✭ From the above table answer the following questions:

◆ From which school has maximum number of students participated?

◆ From which school has maximum number of girls participated?

◆ From which school has maximum number of boys participated?

✶ For the participants of other five schools the incharge give the responsibility to the volunteer for tabulation. Complete the table by putting tally marks prepared by the volunteer.

Name of Schools	Boys	Girls	Total
Kaziranga L.P. School			B-15 + G-18
Saraighat M.V. School			23 + 21
Rang Ghar L.P. School			19 + 20
Bhupen Hazarika L.P. School			22 + 23
Kalaguru Higher Primary School			23 + 20

✶ Discuss the data obtained by the volunteer and try to findout the answers of the following questions.
 ◆ What is the total numbers of boys participants?
 ◆ From which school has minimum girls participated?
 ◆ From which school has maximum students participated?
✶ The number of participants in different competitions has been explained by the sports committee using symbols with the help of following table.

Competitions/ Events	Boys	Girls	Total
Running	☺ ☺ ☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	65
Kabaddi	☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺	63
Football	☺ ☺ ☺ ☺ ☺ ☺ ☺ ☺ ◡	☺ ☺ ☺ ☺ ☺ ☺ ☺	77
Relay Race	☺ ☺ ☺ ☺ ☺	☺ ☺ ☺ ☺ ☺ ☺	55

Meaning of Symbols : ◯ → 1   ⦿ → 2   ⬪⬪ → 3   ◡ → 4   ☺ → 5

✶ From the above table answer the following questions in group
 – In which sports maximum number of players has participated? ⬭
 – In which sports has minimum number of players participated? ⬭

– How many girls in total have participated in sports? [ ]

– In which sports does the minimum number of girls participated? [ ]

– In football match [ ] number of players are more than Kabaddi.

✶ From the selection, number of players to be participated in the main sports is represented by the following table.

Competitions/Events	Total no. of participants
Running race	12 nos.
Kabaddi	14 nos. (in two teams)
Football	22 nos. (in two teams)
Relay Race	8 nos. (in two teams)

✶ Let us express the given data in the above table with the help of a Bar Graph as follows.
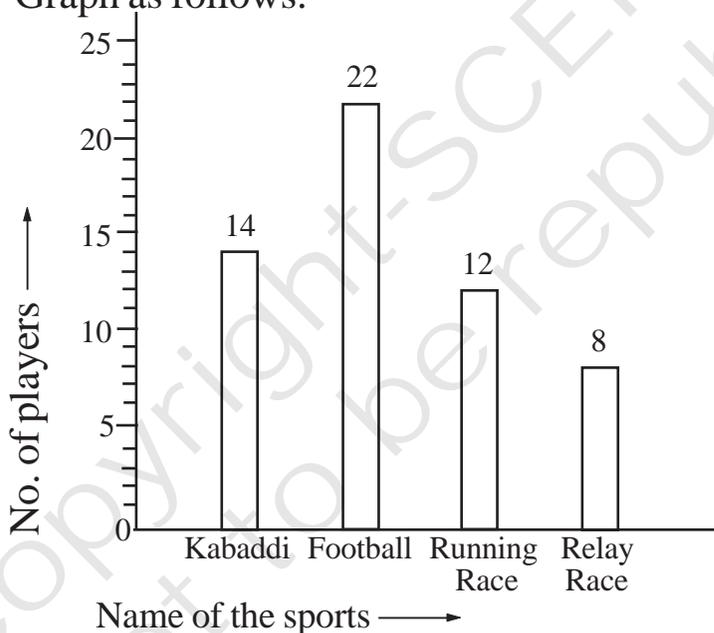
Understand
The height of each bar represents the no. of players in that particular event.

★ Let us answer the following by using the above bar graph.

How many players are selected for the football game? [ ]

In which sport does the minimum number of players get chance? [ ]

In which sport more than 15 players get chance? [ ]

✳ By collecting the information related to blood groups of the players of two teams who played football final are listed as follows

A	B	AB	O	A	B	O	A	B	O
B	O	A	B	B	O	B	A	O	B
O	A	O	B	O	A	O	B	O	AB

From the above data prepare the following table:

Blood groups	Tally marks	Total

Fill in the blanks, after completing the above table.

a. Maximum number of players have ☐ blood group.

b. Minimum number of players have ☐ blood group.

c. Number of players of blood group B is ☐.

d. Express the data from the above table by bar graph in the adjacent grid sheet/paper.

e. Do you know your blood group? Collect the blood group of each students of your classroom and prepare a table.

No. of players →

11
10
9
8
7
6
5
4
3
2
1
0

A   B   AB   O

Blood Group →
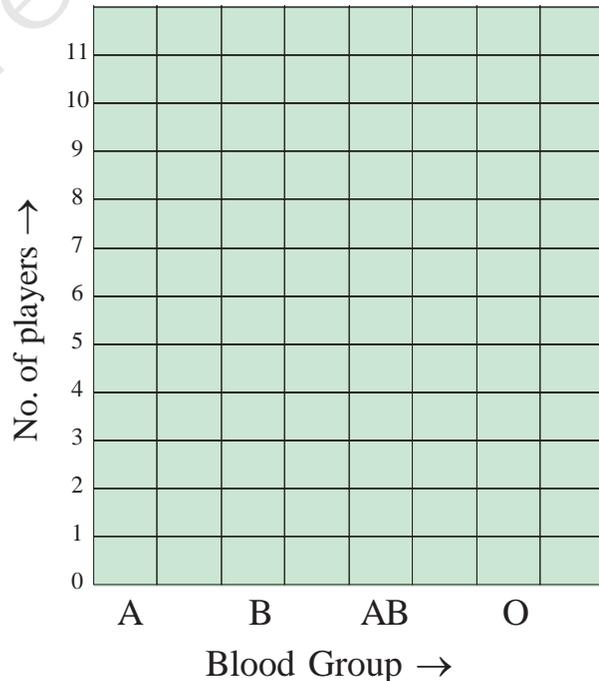
* The list of medals received by the four state of the different sports competitions held among all the North Eastern States are as follows:

|			
Assam	- Gold - 22	Arunachal Pradesh -	Gold - 10
	Silver -18		Silver - 15
Meghalaya	- Gold - 12	Mizoram -	Gold - 16
	Silver - 22		Silver - 20

Let us express the above data of medals in a table and in a bar graph.

Name of the State	Gold	Silver	Total
Assam	22	18	40
Arunachal Pradesh			
Mizoram			
Meghalaya			

1 square = 2 Medals

Gold ▉
Silver ▉

No. of medals →

Assam   Meghalaya   Mizoram   Arunachal Pradesh

Name of the States →
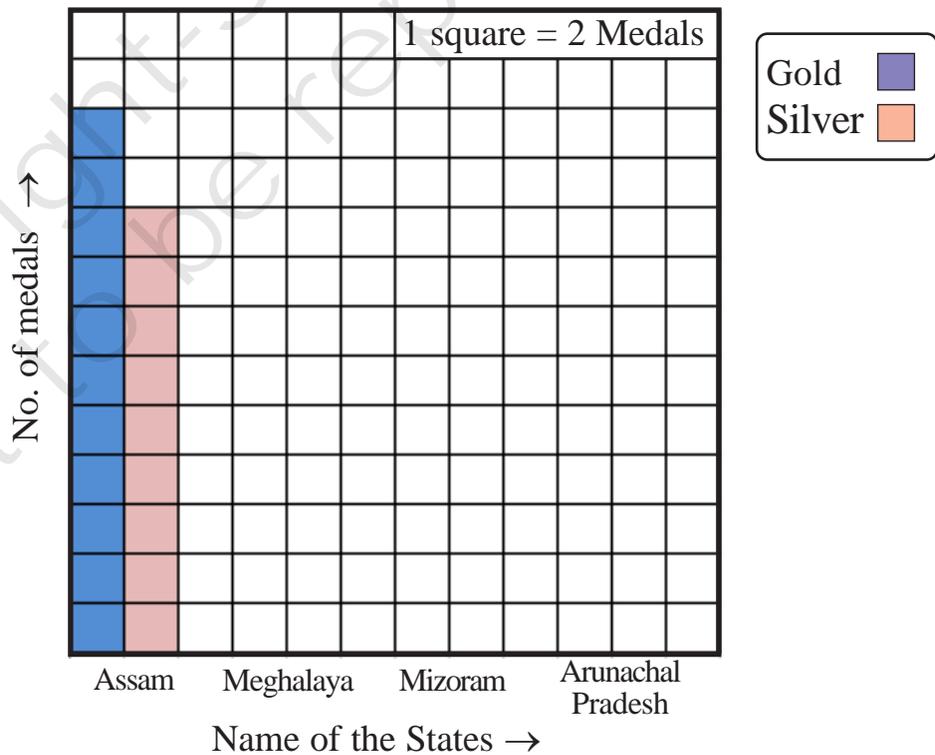
Project : 1

Collect the data of your annual games and sports held in your school and write the following table.

✶ How many students have participated?

✶ Write the name of the games played in the competition separately.

✶ In each department how many boys or girls have participated?

Complete the following table.

Sports	Boys	Girls	Total
Running race			

✶ By taking the different games played and number of total students, express the data from above table in a bar graph.

✶ A teacher of a school asked the students of class five the name of the games they are interested in and the reply is as follows :

Game they liked	No. of students
Football	10
Badminton	3
Swimming	4
Land-water	5
Carrom	4
Running race	6

The above data is expressed in pictograph as

Games they liked	Number of students $\text{\textipa{R}} \rightarrow$ one student									
Football	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆
Badminton	☆	☆	☆							
Swimming	☆	☆	☆	☆						
Land-water	☆	☆	☆	☆	☆					
Caroom	☆	☆	☆	☆						
Running Race	☆	☆	☆	☆	☆	☆				

Now the teacher expressed the data of the table in bar graph as –
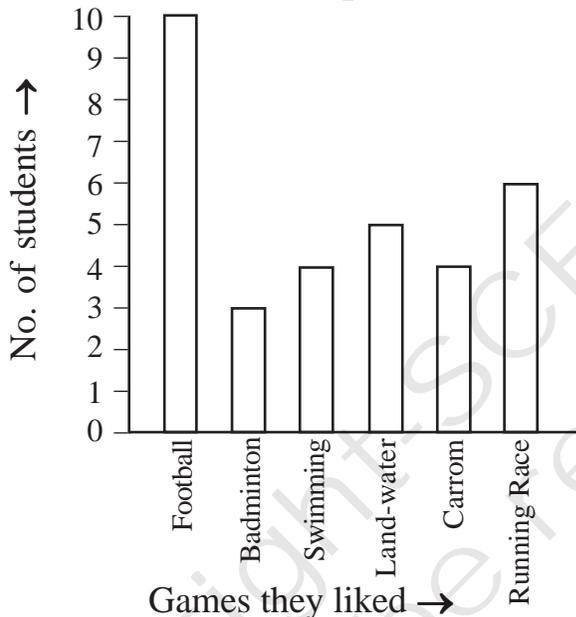
Observe the bar graph carefully and answer the following questions.

→What is the total number of students who liked running race?

→Which are two games liked by same number of students?

→Which game is mostly liked by the students?

Activity : Let us see who likes what to do in spare time.

Make a survey in your class with the help of your teacher what you like to do in spare time and fill up the table below.

Hobby	Tally Marks	No. of students
Game and sports		
Dance		
Music		
Drawing		
Gardening		
Others		

Let us answer the following questions from this table.

a. No. of students who like to sing

b. No. of students who like to dance

c. No. of students who like to draw

d. The hobby which is mostly liked by the students

e. The hobby which is least liked by the students

Let us know who likes what fruit to eat.

Let us prepare a table in your classroom making marks regarding who likes what fruit to eat. One will recite the names of fruits according to the table and the students who like that fruit will raise their hands and everybody will fill up the table making tally marks counting their number themselves.

Name of fruits	Tally Marks	No. of students
Banana		
Mango		
Apple		
Guava		
Black Berry		
Orange		
Pomegranate		

The fruit which is mostly liked by the students is ....

The fruit which is least liked by the students is ....

A visit to South India

Ramesh and his family members are ready to travel Chennai in December. Chilly weather prevails in Assam. Warm cloths should be taken while travelling in winter. As a result the bags of garments become heavy. However Chennai is less chilly at that time. So his father has taken the help of internet to know last five days temperature of Chennai. The informations that he has found are shown in the nearby diagram.

Temperature of Chennai
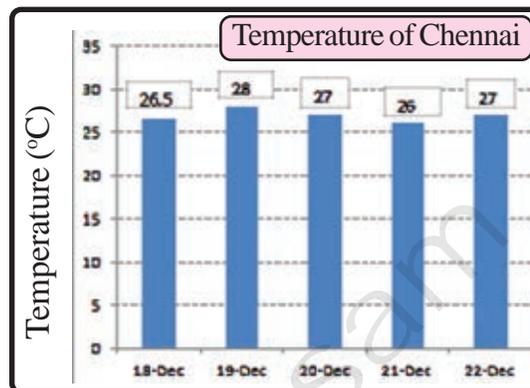
Ramesh has also gone through the temperature of the last five days of Assam with the help of internate. The data he found is expressed in the nearby diagram.

Temperature of Guwahati
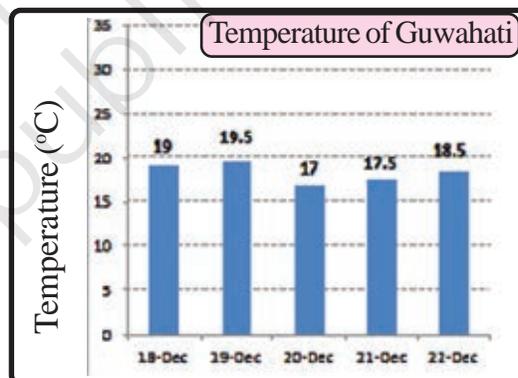
What have you learnt from the two diagrams

* Which place is cooler?

* On 18 December the temperature of Chennai was _____ and the temperature of Assam was _____.

* On 20 December, temperature of Chennai was _____ °C more than the temperature of Assam.

* On 22 December, the difference between the temperature of Chennai and Assam was _____ °C.

Note: Celsius is the measurement of temperature. From the diagram, it has been observed that the temperature of Guwahati on 18 December is 19 degree celsius. It is written as 19°C.

✷ Prepare a table of birthday of the students of your classroom.

Month	Tally Marks	Number
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

Answer the following questions:

a. In which month most birthdays has fallen?

b. In which month least birthdays has fallen?

c. How many students' birthday has fallen in the month of January?

d. How many students' birthday has fallen in the month of May and June alltogether?

e. Is there any month in which none of the students birthday has fallen?

f. Express the data of the table in a bar graph.

✷ Collect the birthday of your family members. According to their month of birth prepare a table as above.

(**Practice Time**)

1. Watching through the window for an hour one day a boy counted the numbers of different vehicles running on the street. His account is given below in a pictograph.

Vehicles	Number of vehicles
Auto Rickshaw	
Motor Cyele	
Cycle	
Small vehicle	

Observe the pictograph and answer the following questions:

– Which vehicle did run the most?

– Which vehicle did run the least?

– Among cycle and motorcycle, which did run more?

– What is the total number of two wheeler?

– Express the data of the pictograph with the help of bar graph.

2. The weight and height of five students of your class is given as follows

Name of the students	Measurement of height	Measurement of weight
Ayat Rahman	70 cm	35 kg
Vinay Bodo	64 cm	31 kg
Kakoli Rongpipi	55 cm	25 kg
Tulumoni Nath	75 cm	36 kg
Minati Rai	60 cm	55 kg

→ Express the data in two bar graphs.

✭ **Project :** Each student will make a list of the number of vehicles running on the street infront of his house from 9 a.m. to 10 a.m. on a Sunday. Discuss among yourselves the data each of you collect. Find out infront of whose houses the number of vehicles on the street are the highest and the lowest.

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