

**CBSE Class 6 Maths Notes Chapter 9:** In CBSE Class 6 Maths Notes Chapter 9 Data Handling students learn how to organise, represent, and understand data. It covers fundamental ideas including gathering data, arranging data in tables, and displaying data with bar graphs and pictographs.

Students gain knowledge on how to create and analyze these graphs, draw conclusions, and comprehend the significance of data in day-to-day activities. To help students handle raw data successfully, the chapter places a strong emphasis on tally marks and frequency distribution. Additionally, it fosters in students the critical analysis and conclusion-drawing from graphical data representations that are necessary for future research.

## **CBSE Class 6 Maths Notes Chapter 9 Overview**

In CBSE Class 6 Maths Notes Chapter 9 Data Handling students learn the fundamentals of gathering, organising, and interpreting data a necessary ability for making decisions in daily life. This chapter helps students visualise and evaluate information by introducing key ideas like bar graphs and pictographs. By studying frequency distribution and tally marks, students can learn how to methodically organise data, which facilitates the analysis of vast volumes of data.

In addition to improving students' mathematical abilities, this chapter fosters critical thinking, which helps them make sense of the information they are given. Students get insight into the practical uses of data by learning how to accurately display and evaluate information. These uses range from monitoring daily activities to making sound choices based on patterns and trends. By laying the groundwork for more complex data analysis topics in later classes, this chapter develops analytical skills at a young age.

## **CBSE Class 6 Maths Notes Chapter 9 Data Handling**

Below is the CBSE Class 6 Maths Notes Chapter 9 Data Handling -

### **Data and Information**

A set of numbers compiled to provide some information is called data.

### **Frequency**

- Frequency is the number of times a particular value occurs in a given data.
- Eg : Marks scored by different students in a class: 1, 2, 2, 4, 3, 3.

**Marks**

**Frequency**

1	1
2	2
3	2
4	1

## Organised Data

Appropriate data organisation is necessary.

This facilitates information extraction.

Example: Twenty students were given the task of selecting one fruit each from the following: banana, orange, apple, and guava.

The arranged data for the information above is provided below.

Fruits	No. of Students
Banana	8
Orange	3
Apple	5
Guava	4

## Prioritizing Data

Data can be arranged in a specific order based on importance or prioritised.

For instance, the names of the students in a class are Anu, Shameer, Kiran, and John. Sort the data in alphabetical order of priority. Anu, John, Kiran, and Shammer are the new names in order once the data is prioritised.

## How to Organise Data?

- Data can be organised in different ways. It can be organised in
  - Alphabetical order
  - In ascending and descending order.
- Example: Arrange the following data according to the birth year.

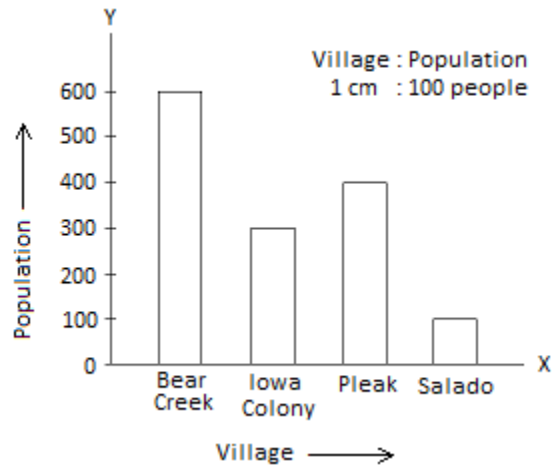
Ravi	Shekhar	Sunny	Asha
1970	1988	1979	1920

**Organised data:**

Asha	Ravi	Sunny	Shekhar
1920	1970	1979	1988

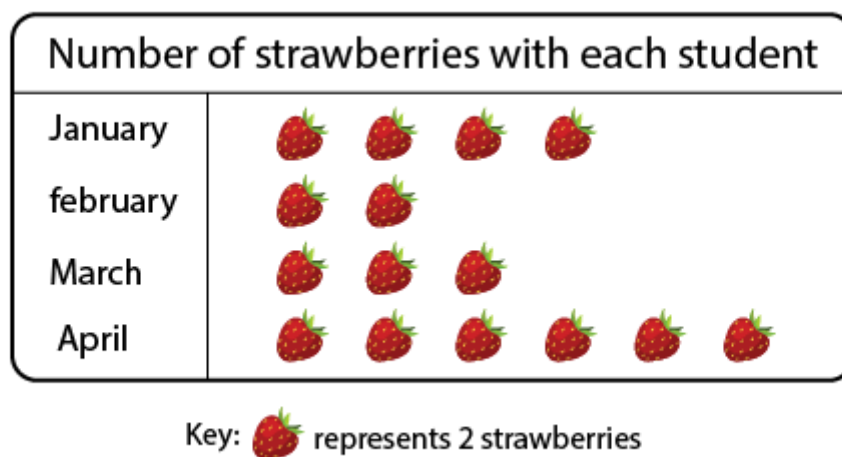
## Scaling Factor

Large numbers are reduced or scaled down using the scaling factor since they cannot be shown in a bar graph.



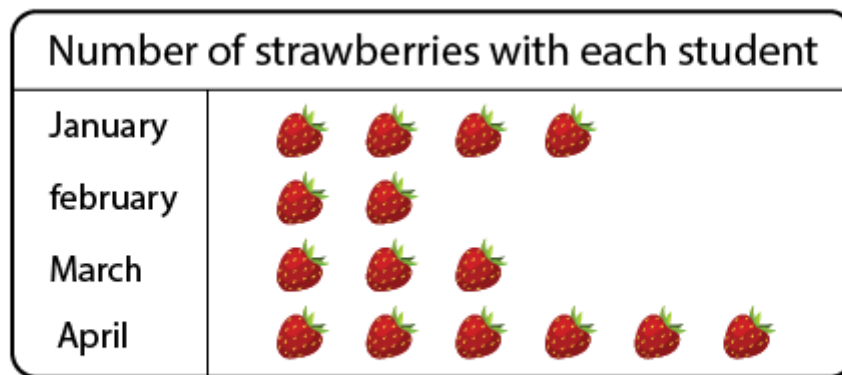
## Pictographs


- The pictograph is a pictorial representation of data.
- Here data is represented using images of the objects.



## Interpretation of Pictographs

The number of strawberries eaten by various people is shown below.



Key:  represents 2 strawberries

Question. Find the number of apples eaten by Margaret, Susan, Maria and Dorothy.

Solution: Here each symbol of strawberry represents two strawberries.

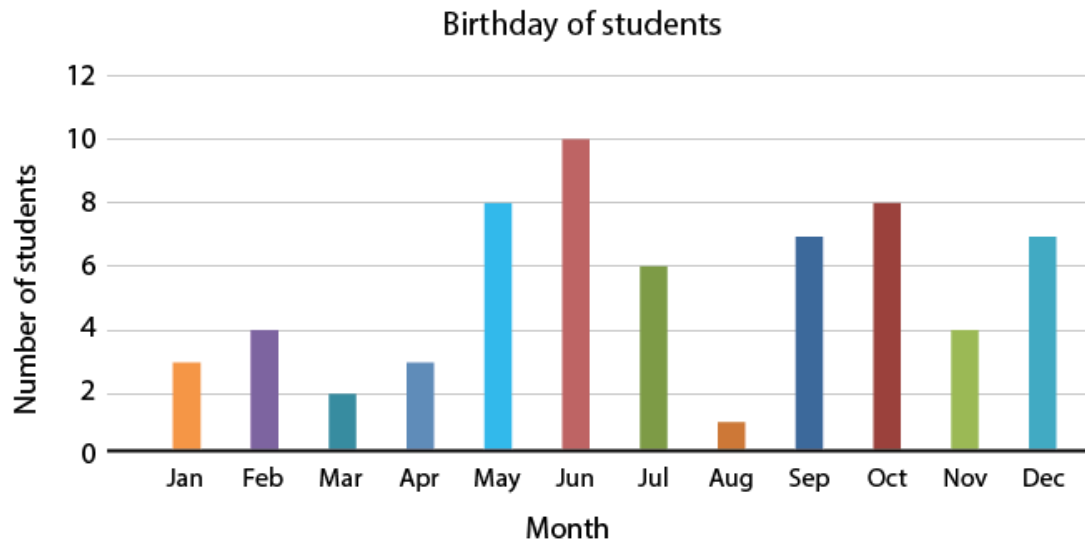
⇒ Margaret ate 8 strawberries, Susan ate 4 strawberries,  
Maria ate 2 strawberries and Dorothy ate 12 strawberries.  
So, the total number of strawberries eaten by all the four is 30.

## Bar Diagrams

Bar graphs and bar diagrams are graphical representations of data made up of uniformly widened bars drawn either vertically or horizontally at varying lengths.

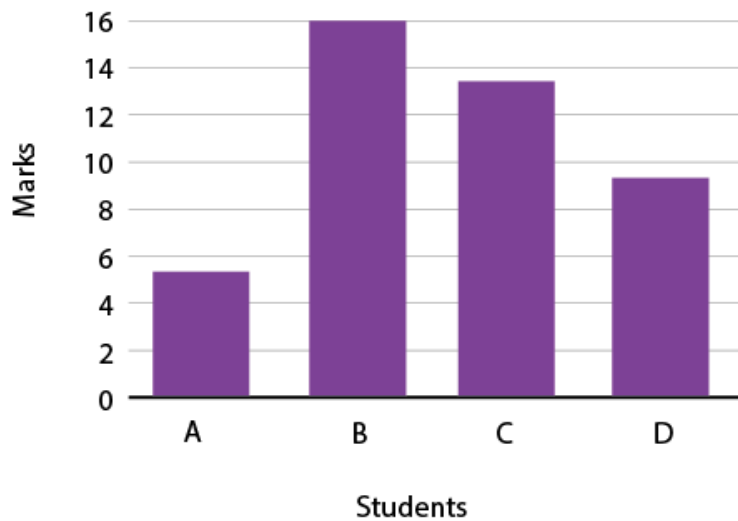
The X- and Y-axes are the two axes that make up bar graphs.

The birthdays of the students in a class are displayed in the bar graph that follows.



### Interpretation of Bar Diagrams

- Given below are the marks scored by students in mathematics. Calculate the sum of marks scored by A and C.



**Solution:**

Students	Marks Obtained
A	8
B	14

C	9
D	5

Sum of marks scored by A and C =  $8 + 9 = 17$

∴ The required sum is 17.

Data is a collection of numbers that have been compiled to provide useful information. Pictographs employ visual symbols or icons to represent data sets and display numerical information. A pictograph is also a visual data presentation that makes use of symbols, images, icons, and other elements.

## What Is the Bar graph?

Another name for a bar graph is a bar chart. It is utilised to visually depict data using bars that vary in length or height. To facilitate quick judgements and value comparison amongst viewers, the data is plotted either vertically or horizontally.

## Benefits of CBSE Class 6 Maths Notes Chapter 9

The benefits of CBSE Class 6 Maths Chapter 9 "Data Handling" include:

**Understanding Data Collection:** It helps students learn how to collect and organize raw data systematically for easy analysis.

**Visual Representation:** The chapter introduces methods like pictographs and bar graphs, allowing students to represent data visually, making interpretation easier.

**Analytical Skills:** Students develop skills to analyze and interpret data, draw conclusions, and make decisions based on the information provided.

**Practical Applications:** The concepts learned are applicable in real-life situations, such as organizing daily activities, tracking patterns, and solving problems through data analysis.

**Foundation for Advanced Concepts:** It prepares students for more complex data analysis techniques in higher classes, including statistics and probability.

**Critical Thinking:** Enhances students' ability to critically evaluate data and make logical inferences, improving problem-solving skills.