

- **Data** is a collection of numbers or facts.

Example: Number of students in 5 classes – 40, 42, 38, 45, 50.

- **Range** is the difference between maximum and minimum value in a dataset.
- **Frequency** means number of times an item appears.
- **Observation** is each individual value in the data.
- **Types of Data**

- **Raw Data:** Unorganized data (e.g., 5, 2, 7, 9, 1)
- **Organized Data:** Arranged form of data (e.g., 1, 2, 5, 7, 9)

- **Tally Marks**

Each group of five is represented by four vertical lines and one diagonal line.

Number	Tally marks
1	I
2	II
3	III
4	IIII
5	

- **Pictograph**

A pictograph uses pictures or symbols to represent data.

Example:

1 ○ / ■ = 2 Apples/2Bananas

Fruits	No. of symbols	Total
Apples	○○○	$3 \times 2 = 6$
Bananas	■■	$2 \times 2 = 4$

- **Bar Graph**

- A Bar Graph uses bars of equal width.
- The height of the bar shows the number of items.
- Can be Vertical or Horizontal.
- Important for comparison.

