

Chapter 04 Data Handling and Presentation

Class : 6th Standard NCERT School: Christ, Harividyalaya Date Created : Jan 2026

Mindmap

- Data
 - Collection of facts (numbers, words, measurements)
 - Types: Numerical, Categorical
- Recording Data
 - Use of tally marks
 - Organizing in tables
- Organisation of Data
 - Frequency table
 - Example: Marks of 20 students → grouped with tally marks
- Pictograph
 - Representation using pictures/symbols
 - Key/scale needed (e.g., 🍎 = 5 apples)
- Bar Graph
 - Bars of equal width, varying height
 - Drawn horizontally or vertically
 - Scale on y-axis (or x-axis for horizontal)
- Interpretation
 - Read pictographs & bar graphs to answer questions
 - Find max, min, total, difference
- Choosing a Scale
 - Depends on data size (e.g., 1 unit = 10 students)

Notes with Relevant Examples

1. Data: Information collected for a purpose.
Example: Number of students absent each day in a week → [2, 0, 3, 1, 4]
2. Tally Marks:
Example: Scores of 10 students: 5, 3, 2, 5, 4, 3, 5, 2, 3, 3
Frequency table:
 - Score 2: || → 2
 - Score 3: ||| → 4
 - Score 4: | → 1
 - Score 5: ||| → 3
3. Pictograph:
Example: Number of cars sold in a week:
 - Monday: 10 → 🚗🚗 (Key: 🚗 = 5 cars)
 - Tuesday: 15 → 🚗🚗🚗
4. Bar Graph:
Example: Favourite fruits of 30 students
 - Mango: 10 → bar height = 10
 - Apple: 8
 - Banana: 6
 - Orange: 6Use scale: 1 unit = 2 students → bar for mango = 5 units high

5. Interpretation:

From bar graph:

- Most liked fruit → Mango
- Least liked → Banana & Orange (tied)
- Difference between Mango and Apple = $10 - 8 = 2$ students

Unit Test

Q1. What is data? Give one example.

Q2. The marks obtained by 10 students in Maths are:

7, 9, 6, 8, 7, 9, 7, 6, 8, 7

Make a frequency table using tally marks.

Q3. Draw a pictograph to represent the following:

Number of books read by five students:

Aman – 8, Bina – 4, Chetan – 12, Dina – 6, Esha – 10

Use symbol  = 2 books.

Q4. The following table shows number of bicycles manufactured in a factory during 2020–2024:

Year	2020	2021	2022	2023	2024
Bicycles	800	1000	1400	1200	1600

Draw a bar graph (take 1 unit = 200 bicycles).

Q5. From the bar graph in Q4, answer:

- (a) In which year were the maximum bicycles manufactured?
 (b) How many more bicycles were made in 2024 than in 2020?

Worksheet

W1. The choice of sweets of 30 students is as follows:


Ladoo, Barfi, Ladoo, Jalebi, Ladoo, Rasgulla, Barfi, Ladoo, Jalebi, Ladoo, Rasgulla, Ladoo, Barfi, Ladoo, Jalebi, Rasgulla, Ladoo, Barfi, Jalebi, Ladoo, Rasgulla, Ladoo, Barfi, Ladoo, Jalebi, Rasgulla, Ladoo, Barfi, Jalebi, Ladoo

- (a) Arrange the choices in a frequency table using tally marks.
 (b) Which sweet is most preferred?


W2. A pictograph shows number of tractors in five villages:


Village A: 

Village B: 

Village C: 

Village D: 

Village E: 

Key:  = 2 tractors

Answer:

- (a) Which village has the minimum number of tractors?
 (b) How many more tractors does Village D have than Village B?

W3. The number of girl students in each class of a co-educational school is:

Class	I	II	III	IV	V	VI	VII	VIII
Girls	10	15	12	8	18	16	14	10

Draw a bar graph (scale: 1 unit = 2 girls).

W4. Observe the bar graph showing temperature (in °C) of five cities on a winter day:
 Delhi – 10, Shimla – 2, Mumbai – 22, Srinagar – 0, Bengaluru – 18

Answer:

- (a) Which city is the coldest?
 (b) What is the temperature difference between Mumbai and Srinagar?

Solutions – Unit Test

A1. Data is a collection of facts, such as numbers, words, or measurements.

Example: Heights of students in a class.

A2. Frequency table:

- 6: || → 2
- 7: |||| | → 5
- 8: || → 2
- 9: || → 2

A3. Pictograph:

Aman:  (8 ÷ 2 = 4 symbols)

Bina: 

Chetan: 

Dina: 

Esha: 

A4. Bar graph:

- 2020: 4 units (800 ÷ 200)
 - 2021: 5 units
 - 2022: 7 units
 - 2023: 6 units
 - 2024: 8 units
- (Vertical bars with years on x-axis, height as above)

A5.

(a) 2024

(b) $1600 - 800 = 800$ bicycles

Solutions – Worksheet

W1.

(a)

- Ladoo: |||| |||| |||| | $\rightarrow 15$
 - Barfi: |||| | $\rightarrow 6$
 - Jalebi: |||| $\rightarrow 5$
 - Rasgulla: |||| $\rightarrow 4$
- (b) Ladoo

W2.

(a) Village B (2 tractors)

(b) Village D = 8, Village B = 2 \rightarrow Difference = 6 tractors

W3. Bar graph:

- I: 5 units
 - II: 7.5 units
 - III: 6 units
 - IV: 4 units
 - V: 9 units
 - VI: 8 units
 - VII: 7 units
 - VIII: 5 units
- (Use half-unit for II if needed, or adjust scale to 1 unit = 1 girl)

W4.

(a) Srinagar (0°C)

(b) $22 - 0 = 22^{\circ}\text{C}$