(a) Bar Charts

Notes:

- Used for **categorical data**.

- Each bar represents a **category**, and the height shows the **frequency** or value.

- **Composite (stacked) bar charts** show components within each category stacked on top.

- **Dual (side-by-side) bar charts** compare two sets of data side-by-side for each category.

Example:

Favorite Fruit	Frequency
Apple	5
Banana	7
Orange	4

Bar chart would have bars for Apple, Banana, and Orange with heights 5, 7, and 4 respectively.

(b) Pie Charts

Notes:

- Used to represent parts of a **whole** (usually percentages or proportions).

- A full circle is **360°**.

- To calculate angle for a category:

$$\text{Angle} = \frac{\text{Category Frequency}}{\text{Total Frequency}} \times 360°$$

Example: If 20 students chose:

- 10 Pizza

- 6 Burger

- 4 Salad

   Then Pizza gets:

$$\frac{10}{20} \times 360° = 180°$$

(c) Pictograms

Notes:

- Use **pictures or symbols** to represent data.
- Each symbol stands for a fixed number (e.g., 🍎 = 2 apples).
- Partial symbols can be used for in-between values.

Example: 🍎 = 2 apples

- Apples: 🍎🍎🍎 = 6
- Bananas: 🍌🍌🍌🍌🍌 = 10

(d) Stem-and-Leaf Diagrams

Notes:

- Used for **numerical data**.
- Split each number into a **stem** (e.g., tens) and a **leaf** (e.g., units).
- Data must be **ordered**.
- Always include a **key** (e.g., 4 | 7 = 47).

Example (for data: 41, 42, 45, 47, 53):

Example (for data: 41, 42, 45, 47, 53):

```makefile
4 | 1 2 5 7
5 | 3
Key: 4 | 1 means 41
```

(e) Simple Frequency Distributions

Notes:

- Lists values or class intervals alongside their **frequencies**.
- Can be used for **discrete** or **grouped** data.

Example:

Score	Frequency
1	2
2	5
3	3

Grouped Example:

Class Interval	Frequency
0–10	4
11–20	7
21–30	5