

MATH · Y3–Y6

# Statistics & Data

Knowledge Organiser — Y3–Y6

## Types of chart

1

### Pictogram

Uses pictures or symbols to represent data. Each symbol = a set number.

*Example:* ■ = 5 apples

2

### Bar chart

Uses bars of different heights to show discrete data. Gaps between bars.

*Example:* favourite colours

3

### Line graph

Shows how data changes over time. Points connected with lines.

*Example:* temperature over a week

4

### Pie chart

A circle divided into sectors — each sector represents a proportion of the whole. Angles must add to 360°.

5

### Frequency table

A table showing how many times each value occurs.

6

### Scatter graph

Shows the relationship between two variables. Look for correlation (pattern).

*Example:* height vs. shoe size

## Averages and spread



1

**Mean**

Add all values  $\div$  number of values.

*Example: Mean of 4,6,8,10 =  $28 \div 4 = 7$*

2

**Median**

The MIDDLE value when data is ordered. If two middle values, find their mean.

*Example: 1,3,5,7,9  $\rightarrow$  median = 5*

3

**Mode**

The value that appears MOST OFTEN.

*Example: 2,3,3,3,4,5  $\rightarrow$  mode = 3*

4

**Range**

Highest value MINUS lowest value. Measures how spread out data is.

*Example:  $10 - 2 = 8$*

