1. Line of Symmetry

A line of symmetry is an imaginary line that divides a shape into two equal mirror-image halves.

- If you fold the shape along the line of symmetry, both halves will match exactly.

Examples:

- A square has 4 lines of symmetry
- A rectangle has 2 lines of symmetry
- A circle has infinite lines of symmetry
- The letter A has 1 vertical line of symmetry
- A heart shape has 1 vertical line of symmetry

2. Types of Lines of Symmetry

Vertical Line of Symmetry

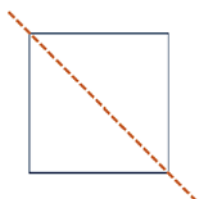- Divides a figure from top to bottom
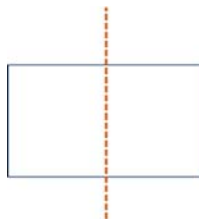
Horizontal Line of Symmetry

- Divides a figure from left to right

Diagonal Line of Symmetry

- Divides a figure corner to corner (like in a square)

3. Properties of Line of Symmetry

i.   It divides a shape into two identical halves

ii. A shape may have one, many, or infinite lines of symmetry

iii. The more symmetrical a shape is, the more balanced it looks

iv. The line can be in any direction: vertical, horizontal, or diagonal

v.   Figures with no symmetry are called asymmetrical

4. Common Shapes and Their Lines of Symmetry

Shape	Lines of Symmetry
Square	4
Rectangle	2
Circle	Infinite
Equilateral Triangle	3
Isosceles Triangle	1
Scalene Triangle	0

5. Summary

- A line of symmetry cuts a shape into two equal parts

- The two parts are mirror images

- Shapes like square, triangle, and circle have lines of symmetry

- Can be vertical, horizontal, or diagonal

Example:

Fold a square along its diagonal — both parts match → it is a line of symmetry