

Symmetry (Including Constructions on Symmetry)

Chapter 16: Symmetry (Including Constructions on Symmetry) · Topic 1

Key Concept

Line symmetry means a shape can be folded along a line so both halves match exactly, like a butterfly's wings.

Some shapes have multiple lines of symmetry, like a square (4 lines), while others have none, like an irregular shape.

Rotational symmetry means a shape looks the same after being rotated less than a full turn, like a pinwheel or certain flowers.

Understanding symmetry helps us appreciate patterns in nature, art, and architecture, and construct symmetrical designs accurately.

Quick Revision Notes

- Line symmetry means matching halves when folded.
- A butterfly shows line symmetry.
- A square has 4 lines of symmetry.
- Some shapes have no symmetry.
- Rotational symmetry means looking the same after rotation.
- A pinwheel shows rotational symmetry.
- Symmetry appears in nature, art and architecture.
- Understanding symmetry helps construct designs.

Practice Questions

- 1 Find the lines of symmetry in a square.
- 2 Find an object with line symmetry at home.
- 3 Find an object with rotational symmetry.
- 4 Draw a shape with two lines of symmetry.
- 5 Discuss symmetry in nature, like a leaf or flower.
- 6 Construct a symmetrical design on paper.