

Geometry — Symmetry and Mirror Lines

Base Sheet

Activity Sheet

The child explores symmetry by folding shapes in half to discover mirror lines, then creates symmetrical designs. This lesson develops spatial reasoning and connects to art and nature.

What You Need:

- Construction paper
- Scissors
- Pre-cut shapes (heart, square, circle, rectangle, triangle)
- Paint or ink
- Paintbrush
- Photos of symmetrical objects in nature
- Mirror (optional)

Steps:

1. 'Some shapes look exactly the same on both sides. We call that SYMMETRY!'
2. Cut out a paper heart. Fold it in half. 'See? Both sides match perfectly! The fold line is called the LINE OF SYMMETRY!'
3. Test other shapes: fold a square (4 lines of symmetry), circle (infinite), rectangle (2), triangle (1 or 3)
4. 'Some things in nature are symmetrical too: butterflies, leaves, faces!'
5. Show a photo of a butterfly. 'If we drew a line down the middle, both sides would match!'
6. Symmetry art: fold a paper in half, paint on one side only, press together. Open to reveal the symmetrical design.
7. Child tests 5 objects or shapes for symmetry using the fold test.

Work Space:

