

Shapes at a Glance

What Are Shapes?

Shape knowledge involves understanding:

- The size and shape of objects.
- What objects look like from different angles.
- What objects look like after being rotated, folded, or cut.

Why Is Learning About Shapes Important?

- Learning about shapes prepares children to learn advanced mathematical concepts.
- Children and adults use shape knowledge every day, such as when arranging toys on a shelf or building a block tower.

What Do Children Need to Know About Shapes?

- **Shape names and defining features:** “A square has four equal sides and angles.”
- **How to recognize shape families by identifying similarities and differences:** “Rectangles, squares, and parallelograms are all part of the same shape family because they have four sides but are different in important ways.”
- **What common shapes look like when rotated:** “Although shapes do not change after being rotated, they can look different.”
- **How to make different shapes by combining, folding, or cutting them:** “Cutting a square along its diagonal results in two triangles.”



You can split a square into triangles.



There are different types of triangles, but they all have 3 sides and 3 angles.

How Can We Help Children Learn Shapes?

Talk About Shapes Throughout the Day

- Use geometric shape names: circle, triangle, square
- Use words for parts of shapes: corner, side, angle, edge
- Use words that describe shapes: tall, curved, narrow

Ideas for Exploring Shapes During:

Centers/Small Groups

Draw Your Building: Children build a structure with blocks and then draw their three-dimensional structure as two-dimensional shapes. This helps children visualize and represent shapes in different dimensions.

Guided Small Group

Don't Burn Your Feet: The teacher tells children to avoid burning their feet on the “lava” by moving to different shapes on the floor based on the shapes’ names or features. This is an interactive, fun way for students to practice comparing shapes.

Math Moments

Find Shapes in Food: Ask children to find shapes in their food and to compare foods to true shapes: “How is a watermelon slice like a triangle? How is it different?”

How Can We Support Learning About Shapes at Home?

Encourage families to:

- **Identify shapes around them:** Challenge children to find shapes during daily activities, like while walking to the park or reading. If an object doesn't exactly match the features of a shape, talk about how it is similar and how it is different.
- **Build together:** Build structures using blocks or household items. Use shape language to describe the shapes of blocks or parts of the building, which can help children decide what materials they need.
- **Do puzzles:** Describe the features of the shapes while helping children figure out where each piece goes.