

## Objective

By the end of this lesson, you will be able to perform transformations by combining and splitting two-dimensional shapes.

## Materials and Prep

Materials needed: pencil, eraser, ruler, paper.

Prep: Make sure you have a clear workspace to work on your activities.

## Activities

- **Shape Combining:** Draw two different shapes on a piece of paper. Combine them to create a new shape. Describe the new shape you have created.
- **Shape Splitting:** Draw a complex shape on paper. Now, try to split it into smaller shapes. How many different ways can you split the shape?
- **Shape Transformation:** Take a shape and try rotating it, flipping it, or sliding it to see how it changes. Can you describe the transformation that occurred?

## Talking Points

- **Shapes can be combined:** "When we put two shapes together, we can create a new shape. What happens when we combine a square and a triangle?"
- **Shapes can be split:** "Sometimes, a shape can be split into smaller shapes. How many different ways can we split a rectangle?"
- **Transformations change shapes:** "When we move a shape in different ways, it undergoes a transformation. Can you show me how a triangle changes when we flip it?"