



### More About Math

#### Background for Leaders

This unit helps 4-5 year old children develop the geometry skills of identifying, naming, sorting and matching a variety of two-dimensional (flat) shapes and composing complex shapes from simple shapes.

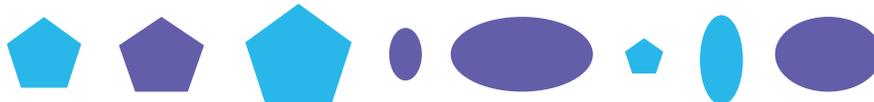


#### Identify and Name Shapes

Children at this age can identify and name shapes by defining attributes such as the number of sides or if the shapes have curved or straight sides. Children will be most familiar with circles, squares, and triangles. Some children may assume any shape with four sides and four angles (vertices) is a square and need help making the distinction between a rectangle and a square. Show the children several examples of squares and rectangles and ask them to sort the shapes into two groups. Children may recognize something is different about the shapes while sorting them. If children name a rectangle as a square you can remind them of the difference, "Oops, that is a rectangle, remember rectangles can have one set of sides that is longer than the other."

#### Sort and Match Shapes by Attributes

Children at this age can sort and match objects by defining attributes even before they have formal names for the shapes. For example, they may put all of the purple shapes together or sort all of the shapes with three sides. Prompt children to name each group to help build their math vocabulary for the shapes. As sorting and matching skills develop, challenge children to sort objects by two or three characteristics at a time and to explain how they knew the shapes matched. For example, "Find all of the blue pentagons" (color and shape) or "Find all of the large purple ovals" (size, color, and shape).



#### Create Complex shapes from Simple Shapes

Once children have learned the basic shapes, encourage them to put two or more shapes together and form a new shape called a composite shape. For example, putting two triangles together forms a rectangle. Children can also use composite shapes to make a house, an animal, or any other picture or shape they want to create. Encourage their creativity and ask children to choose a name for their new shape.