

Dear Family,

This week your child is learning to classify two-dimensional figures.

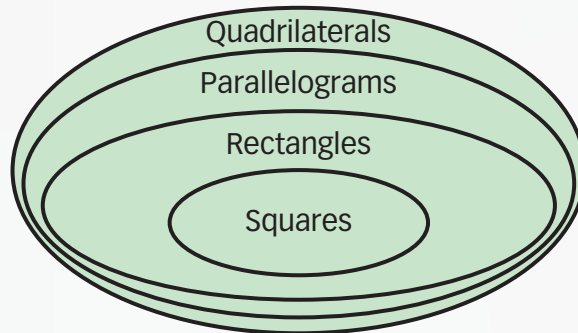


You can classify all polygons, or special two-dimensional figures, by their properties. Some properties of figures are the number of sides they have, whether the sides are perpendicular or parallel, and what kinds of angles they have.

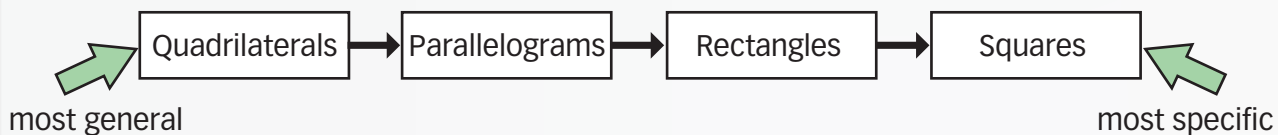
You can use a hierarchy to rank categories of figures. At the top of the hierarchy is the category for the most general group. As you go down a hierarchy, you can see how more specific groups are related.

You can use a hierarchy to show how figures such as squares, rectangles, parallelograms, and other quadrilaterals (four-sided figures) are related. A useful way to show categories in a hierarchy is with a Venn diagram.

The Venn diagram at the right shows that quadrilaterals are the most general category. All figures that have four sides are quadrilaterals. Parallelograms, rectangles, and squares are kinds of quadrilaterals.



Another way that your child is learning to classify figures is with a flow chart. The flow chart below shows the hierarchy of quadrilaterals from left to right.



Invite your child to share what he or she knows about classifying two-dimensional figures by doing the following activity together.



Classifying Two-Dimensional Figures Activity

Work together with your child to draw a figure based on a description of the figure's properties.

- Use the dot paper below. One person describes properties of a figure and the other person draws and names the figure based on the description of its properties.
- Here are some examples:
 - The figure is a quadrilateral that has at least 1 pair of parallel sides (trapezoid, parallelogram, rectangle, square, rhombus).
 - The figure has 4 sides of equal length, 2 pairs of parallel sides, and 4 right angles. (square)
 - The figure has 4 sides, its opposite sides are parallel, and it has four right angles. (rectangle or square)

