



Dear Parents,

Over the next several weeks, we will be learning about **geometry** in math! The information below will help you to support your child as they learn these exciting, yet important third grade math skills.

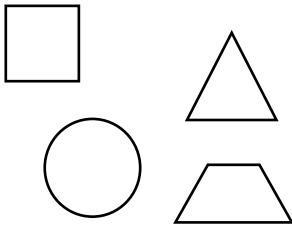
The **GOAL**:

By the end of the unit, your child should be able to *analyze and describe the characteristics of geometric shapes.*

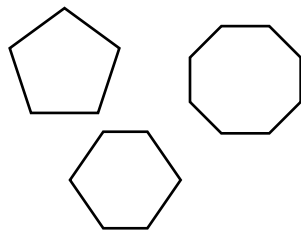
Attributes of Shapes

Group shapes by the number of sides:

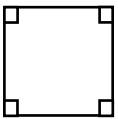
Shapes with 4 sides
or less



Shapes with 5 or
more sides



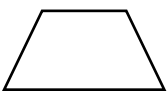
Group shapes by their angles:



This shape has 4 angles that are right angles.



This shape has 3 angles that are less than right angles.

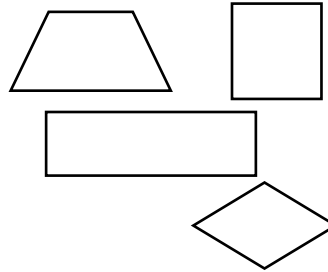


This shape has 2 angles that are less than right angles and 2 angles that are greater than right angles.

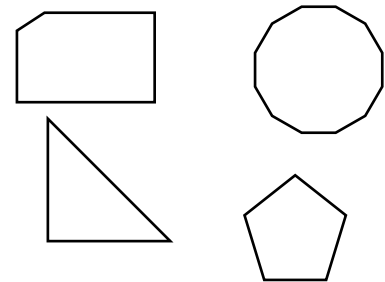
Help your child describe quadrilaterals:

A quadrilateral is a polygon with 4 sides and 4 angles.

Quadrilateral



Not a Quadrilateral



Describe Sides of Polygons:



There are two sets of **parallel lines**.
1 set of solid lines and 1 set of dashed lines.



The solid lines are **perpendicular** because they meet and form a right angle.

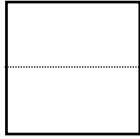


The solid lines are **intersecting** because they meet and form an angle.

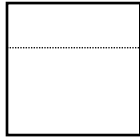


Help your child partition (divide) shapes:

Identify equal and unequal parts.

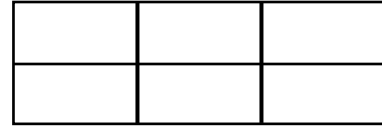


This square has equal parts.



This square does not have equal parts.

Show equal parts as a unit fraction:



The rectangle is divided into six equal parts.
Each part is $\frac{1}{6}$ of the whole.

Grade 3 Math: PA Core Math Standards in Unit 4

CC.2.3.3.A.1: Identify, compare, and classify shapes and their attributes.

CC.2.3.3.A.2: Use the understanding of fractions to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.

-- HOW YOU CAN HELP AT HOME --

- Provide opportunities to identify and/or classify shapes using everyday items
- Use crayons, markers, sidewalk chalk to draw and group shapes
- Use string, Play-doh, spaghetti, pipe cleaners, Popsicle sticks, straws, etc., to make shapes
- Talk about the parts of a shape (how many sides, angles, perpendicular)

-- KEY MATH VOCABULARY --

(Defining) **Attribute:** a characteristic or quality that defines a shape (e.g., 4 equal sides is a defining attribute of a square.)

Partition (divide): break into equal parts

Plane: A flat surface that extends in all directions without ending.

Polygon: A closed shape with straight sides.

Quadrilateral: A quadrilateral is a polygon with 4 sides and 4 angles.

