Unit #4: Math - Geometry (Grade 3)

Content Area: **Mathematics**
Course(s): **Math 3**
Time Period: **Marking Period 3**
Length: **March-April**
Status: **Published**

Established Goals/Standards

Please choose the appropriate Goals/Standards from the Standards tab above.

MA.3.MD.C.7d	Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.
MA.3.MD.D.8	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.
MA.3.G.A.1	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
MA.3.G.A.2	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.

Essential Questions

Please add your Essential Questions by clicking on the Lists tab above.

- How can shapes be combined or separated to make other shapes?
- How can two-dimensional shapes be described, analyzed, and classified?
- How do you describe angles?
- What is important to know about line?

Enduring Understanding

Please add your Enduring Understandings by clicking on the Lists tab above.

- An angle is formed by two rays with a common endpoint. Angles can be classified by their size.
- Lines and line segments are sets of points in space that can be used to describe parts of other geometric lines, shapes, and solids.
- Plane shapes and polygons have many different properties that make them different from one another. Polygons can be classified by their sides and angles.
- Ploygons can be put together or taken apart to make other polygons by touching their edges or vertices

Content

Students will be able to:

- identify lines and line segments and explore their different relationships
- identify and classify angles in relation to right angles
- identify and classify polygons
- identify and classify triangles
- identify and classify quadrilaterals
- create new shapes by combining shapes or by seperating shapes
- make a new shape by cutting apart a shape and rearranging the pieces
- solve a problem by first solving a simpler problem
- identify commonalities among objects or situations to make and test generalizations

Vocabulary students will know:

point

line

line segment

intersecting lines

parallel lines

ray

angle

vertex (of an angle)

right angle

perpendicular

acute angle

obtuse angle

polygon

side

vertex (of a polygon)

diagonal

triangle

quadrilateral

pentagon

hexagon

octagon

decagon

equilateral triangle

isosceles triangle

scalene triangle

right triangle

acute triangle

obtuse triangle

trapezoid

parallelogram

rectange

rhombus

square

Resources

Envision Resources

- www.pearsonsuccessnet.com
- textbook
- student online resources
- Daily Common Core Review
- Quick Checks
- Reteaching/Practice
- Math Centers
- Tangrams
- Geometric shapes

Unit lesson flipcharts

Online Games from teacher website