

Grade 5 Mathematics Unit Preview Quarter 3: Geometry

Objectives: (Your student will be able to)

- **Identify, classify, measure (using a protractor), draw and label acute, right, and obtuse angles.**
Acute angles measure less than 90° , obtuse angles measure greater than 90° , and right angles measure exactly 90° .
- **Identify, describe, label, and draw points, lines, line segments, and rays.**
- **Identify and model transformations: translations (fig 1), reflections (fig 2), and rotations (fig 3).**
- **Identify, define, and classify triangles as equilateral (all sides equal), isosceles (2 sides equal), right, or scalene (no equal sides).**
- **Identify the radius, diameter, and circumference of a circle.**
- **Identify and classify pyramids or prisms as triangular pyramids, rectangular pyramids, triangular prisms, or rectangular prisms by the number of edges, faces, or vertices including the use of nets.**
- **Analyze the relationship between plane geometric figures and surfaces of solid figures.** For example, the net (fig 4) shows that a rectangular pyramid consists of 4 triangles and a square or rectangle.

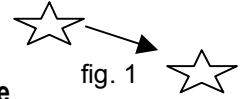


fig. 1

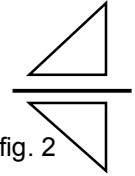


fig. 2

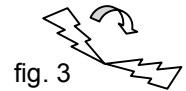


fig. 3

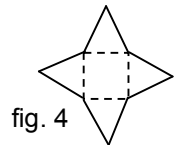


fig. 4

Vocabulary: (Words your student will need to understand)

• Net: A two-dimensional object that can be folded to make a three-dimensional object	• Base: A side of a polygon or a face of a solid figure by which the figure is measured or named
• Congruent: Figures with the same size and shape. Line segments that are equal in length.	• Similar: Figures that have the same shape but different sizes.
• Rotation: Turning a figure around a point	• Intersecting: Two or more lines that cross at exactly one point
• Perpendicular: Two lines that intersect at right angles.	• Parallel: lines that are always the same distance apart
• Solid Figure: A three-dimensional figure	• Two-Dimensional Figure: A measure in two directions, such as length and width
• Translation: Sliding a figure	• Reflection: a mirror image of a figure

Activities to do with your student (in addition to homework, optional):

- Measure and label acute, right, and obtuse angles.
- Identify real world angles as acute, right, or obtuse.
- Create a tessellation of an object using translations, rotations, and reflections.
- Identify and measure the radius and diameter of circles around the house using different units.
- Identify and classify different household objects as solid figures based on the number of edges, faces, and vertices (triangular pyramids, rectangular pyramids, triangular prisms, or rectangular prisms).
- Practice multiplication and division basic facts.

