**Grade 4 G/T Mathematics**

 **Unit 5 Geometry Preview**

Understand *p* + *q* as the number located a distance  from *p*, in the positive or negative direction depending on whether *q* is positive or negative.

**Mathematical Concepts**: (Your child will be able to)

* Graph ordered pairs (5.G.1)
* Graph ordered pairs to solve problems (5.G.2)
* Understand sub-categories of two-dimensional figures (5.G.3)
* Classify two-dimensional figures based on attributes (5.G.4)
* Draw polygons in the coordinate plane to solve real-world and mathematical problems (6.G.3)
* Measure and draw angles using a protractor. (4.MD.6)
* Break apart an angle into 2 smaller angles and know that the larger angle is the sum of the two smaller angles (4.MD.7)

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# Vocabulary: (Words your child will need to understand)

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| • **Regular Polygons:** A plane shape that has equal sides or equal angles | **• Ordered Pair:** a pair of numbers (x, y) that can be used to represent a point in the coordinate plane. |
| **• Irregular Polygons:** A plane shape that does not have all side equal or all angles equal | **• Origin:** The point (0, 0) where the x-axis and the y-axis meet in a coordinate plane. |
| **• Rectangular Prism:** A solid figure in which all six faces are rectangles. | **• Quadrant:** One of the four regions that a coordinate plane is divided into by the x-axis and the y-axis. |
| **• Coordinate Plane:** A plane containing two perpendicular axes (x and y) intersecting at a point called the origin (0, 0) | • **x-axis:** The horizontal axis in a coordinate plane. |
| **• Angles:** The figure formed when two rays or line segments share the same endpoint. | **• y-axis:** The vertical axis in a coordinate plane. |
| **Regular Polygons:** A polygon that has all equal sides or equal angles. | **Square:** A quadrilateral with four equal sides and four right angles, opposite sides that are parallel, two diagonals that bisect at right angles, and four lines of symmetry. |
| **Rectangle:** A quadrilateral with four right angles and two pairs or opposite equal parallel sides. | **Trapezoid:** A quadrilateral with one pair of parallel sides. |
| **Rhombus:** A parallelogram with four equal sides and equal opposite angles. |  |

Optional activities to do with your child:

Math Game – Identify ordered pairs on the coordinate plane <http://www.mathplayground.com/locate_aliens.html>
Write clues to describe polygons. Try to guess your partner’s polygon.

Use a compass or computer to draw geometric figures.
· Name two-dimensional figures and find examples at home.

· Draw different polygons within a piece of triangle grid paper, or use combinations of triangles to create other polygons.

· Make flash cards of different geometric figures and their properties.

· Identify, describe, and different household objects as two-dimensional figures.