Unit 4 Study Guide: Geometry

Test Date:

**Text Book Lessons: McGraw Hill**

* Chapter 12-Lesson 2, 3, 4, 5 (bar graphs, picture graphs, line plots)
* Chapter 12-lesson 6 Hands on: Measure to Halves and Fourths of an Inch
* Chapter 12, lesson 8 Problem Solving
* Chapter 13, lesson 1, 2, 3, 4, 6, 9 Perimeter and Angles
* Chapter 14, Lesson 1 Angles
* Chapter 14, Lesson 2- Polygons
* Chapter 14, Lesson 4 Quadrilaterals
* Chapter 14-Lessons 5-Shared Attributes of Quadrilaterals
* Chapter 14, lesson 6 Problem Solving
* Chapter 14, lesson 7 Partition Shapes

**In this unit, students will:**

• Further develop understandings of geometric figures by focusing on identification and descriptions of plane figures based on geometric properties.

• Identifies examples and non-examples of plane figures and solid figures based on geometric properties.

• Identify differences among quadrilaterals.

• Understand that shapes in different categories may share attributes and those attributes can define a larger category (example: rhombuses, rectangles, and others have four sides and are all called quadrilaterals).

• Expand the ability to see geometry in the real world.

• Can draw plane figure shapes based on attributes.

• Further develop understanding of partitioning shapes into parts with equal areas.

• Partitions shapes in several different ways into equal parts of halves, thirds, fourths, sixths, and eighths and recognizes the partitioned parts have the same area.

• Use data collected to make bar and picture graphs.

• Interpret line plots.

• Find the perimeter of polygons; use addition to find perimeters; solve for an unknown length and recognize the patterns that exist when finding the sum of the lengths and widths of rectangles.

**Web Resources:**

www.IXL.com

* 2 and 3 Dimensional Shapes—W.1, W.2
* Area-W.10-W.16
* Perimeter- W.8, W.9
* Bar Graphs/Pictographs/Line plots-U.5-U.12
* Quadrilaterals- W.26
* Polygons- W.23
* Lines and Angles—W.20, W.21, W.22

**Vocabulary:**

• 2-dimensional

• 3-dimensional

• acute angle

• attributes

• closed figure

• congruent

• cubes, cones, cylinders and rectangular prisms (as subcategories of 3-dimensional figures)

• polygon

• line plot

• obtuse angle

• open figure

• parallel

• parallelogram

• partition

• polygon

• properties

• quadrilateral

• rectangle

• rhombi, rectangles, and squares (as subcategories of quadrilaterals)

• rhombus/rhombi

• right angle

• square

• three-sided

• unit fraction

• area

• overlap

• plane figure

• side length

• square centimeter

• square foot

• square inch

• square meter

• square unit

• tiling