Unit 4 Study Guide: Geometry

Text Book Lessons:

- 4-7 Reading Pictographs and Bar Graphs
- 4-6 Using Line Plots to Organize Data
- 8-1 Solid Figures
- 8-2 Relating Solids and Shapes
- 8-4 Lines and Line Segments
- 8-5 Angles
- 8-6 Polygons
- 8-8 Quadrilaterals
- 8-11 Perimeter
- 9-1 Equal Parts of a Whole

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—R1, R2,
- Area- R10, R11, R12, R13, R14,
- Perimeter- R8, R9, R15, R16, R17
- Partitioning Shapes
- Bar Graphs- P5, P6

- Pictographs- P9, P10
- Line Plots- P7, P8
- Quadrilaterals- R25
- Polygons- R22
- Lines and Angles—R3, R4, R19, R20, R21

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