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| **Common Core Strand** | **Cluster** | **Standard** | **Learning Targets**  6th Grade Math Curriculum Map – 4th Quarter | **Resources** | **Vocabulary** |
| **Geometry** | **Solve real-world and mathematical problems involving area, surface area, and volume.** | 6.G.1  1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. | I can..  - recognize and know how to  compose and decompose polygons into triangles and rectangles. - compare the area of a triangle to the area of the composed rectangle. - apply the techniques of composing and/or decomposing to find the  area of triangles, special  quadrilaterals and polygons to solve mathematical and real world problems. - discuss, develop and justify  formulas for triangles and  parallelograms (6th grade introduction). · | Glencoe 9-4A, B | base height |
| 6.G.2  2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas V = l w h and V = b h to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems. | I can… - calculate the volume of a right rectangular prism. - apply volume formulas for right rectangular prisms to solve real-world and mathematical problems involving rectangular prisms with fractional edge lengths. - model the volume of a right  rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction  edge lengths. | Glencoe Additional Lesson 7 | three-dimensional figure rectangular prism volume cubic units |
| 6.G.3  3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems. | I can… - draw polygons in the coordinate plane. - use coordinates (with the same x-coordinate or the same y- coordinate) to find the length of a side of a polygon. - apply the technique of using coordinates to find the length of a side of a polygon drawn in the coordinate plane to solve real-world and mathematical problems. | Glencoe 9-4C,D | polygon,  coordinate plane, coordinates,  vertices, |
| **Geometry** | **Solve real-world and mathematical problems involving area, surface area, and volume.** | 6.G.4  4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems. | I can… - recognize that 3-D figures can be represented by nets. - represent three-dimensional figures using nets made up of rectangles and triangles. - apply knowledge of calculating the area of rectangles and triangles to a  net. - combine the areas for rectangles and triangles in the net to find the surface area of a 3-dimensional  figure. - solve real-world and mathematical problems involving surface area  using nets. | Glencoe Additional Lesson 8 | nets surface area |
| **Statistics and Probability** | **Develop understanding of statistical variability**. | 6.SP.1  1. Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, “How old am I?” is not a statistical question, but “How old are the students in my school?” is a statistical question because one anticipates variability in students’ ages. | I can… - recognize that data has  variability. - recognize a statistical question (examples versus non-examples). | Glencoe 11-1A, B, D, F  Additional Lesson 8,11 | statistics data statistical question |
| 6.SP.2  2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. | I can… - identify that a set of data has distribution. - describe a set of data by its center, e.g., mean and median. - describe a set of data by its spread and overall shape, e.g. by identifying data clusters, peaks, gaps and symmetry. | Glencoe 11-1A, B, D, F  Additional Lesson 9 | statistics data average mean measures of central tendency median mode range outlier statistical question distribution symmetric |
| 6.SP3  3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. | I can… - recognize there are measures of central tendency for a data set, e.g., mean, median, mode. - recognize that measure of central tendency for a data set summarizes the data with a single number. - recognize that measures of variation for a data set describe how its values vary with a single number. | Glencoe 11-E  11-2C | statistics data average mean measures of central tendency median mode range outlier measure of variation quartile lower quartile upper quartile interquartile range |
| **Statistics and Probability** | **Summarize and describe distributions.** | 6.SP.4  4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. | I can… - identify the components of dot plots, histograms, and box plots. - find the median, quartile and interquartile range of a set of data. - create a dot plot to display a set of numerical data. - create a histogram to display a set of numerical data. - create a box plot to display a set of numerical data. | Glencoe 11-4B | box and whisker plot histogram frequency distribution |
| 6.SP.5a  5. Summarize numerical data sets in relation to their context, such as by:  a. Reporting the number of observations. | I can… - report the number of  observations in a data set or  display. | Glencoe 11-4B | summarize,  numerical data, |
| 6.SP.5b  5. Summarize numerical data sets in relation to their context, such as by:  b. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. | I can… - organize and display data in  tables and graphs. - describe the data being collected,  including how it was measured  and its units of measurement. | Glencoe 11-1B, F  11-4B Additional Lesson 9, 10, 11 | attribute, |
| 6.SP.5c  5. Summarize numerical data sets in relation to their context, such as by:  c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. | I can… - calculate quantitative measures of center, e.g., mean, median, mode. - calculate measures of variance, e.g., range interquartile range, mean absolute deviation. - choose the appropriate measure of central tendency to represent the data. | Glencoe Additional Lesson 11 | statistics data average mean outlier measures of variation range quartile lower quartile upper quartile interquartile range mean absolute deviation distribution symmetric |
| **Statistics and Probability** | **Summarize and describe distributions.** | 6.SP.5d **Summarize and describe distributions.** 5. Summarize numerical data sets in relation to their context, such as by:  d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. | I can… - identify outliers. - determine the effect of outliers on quantitative measures of a set of  data, e.g., mean, median, mode, range, interquartile range, mean absolute deviation. - analyze the shape of the data distribution and the context in which the data were gathered to choose the  appropriate measures of central tendency and variability and justify why this measure is appropriate in terms of the context. | Glencoe 9-4A, B | distribution symmetric |