| **Grade** | **Big Idea** | **Essential Questions** | **Concepts** | **Competencies** | **Standard** | **Eligible Content** | **Vocabulary** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **GEO** | Patterns exhibit relationships that can be extended, described, and generalized.  Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization. | How can patterns be used to describe relationships in mathematical situations?  How can recognizing repetition or regularity assist in solving problems more efficiently?  How are spatial relationships, including shape and dimension, used to draw, construct, model, and represent real situations or solve problems?  How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?  How can geometric properties and theorems be used to describe, model, and analyze situations? | Congruence and Similarity | Use properties of congruence, correspondence, and similarity involving 2- and 3-dimensional figures.  Apply rigid transformations to determine and explain congruence.  Apply non-rigid transformations to determine and explain similarity.  Using various methods, write formal proofs and/or use logic statements to construct or validate arguments.  Make geometric constructions.  Prove geometric theorems about lines, angles, triangles, and parallelograms while focusing on validity of underlying reasoning. | CC.2.3.HS.A.1 CC.2.3.HS.A.2 CC.2.3.HS.A.3 CC.2.3.HS.A.4 CC.2.3.HS.A.5 CC.2.3.HS.A.6 CC.2.3.HS.A.11 | G.1.3.1.1 G.1.3.1.2 G.1.3.2.1 | Acute Angle  Adjacent Angles  Alternate Interior Angles  Altitude  Angle  Angle Bisector  Arc  Arc Length  Area  Chord  Circle  Circumference  Complementary Angles  Composite Figure  Compound Events  Compound Figure  Conditional Probability  Congruence  Correspondence  Corresponding Angles  Cylinder (Right Circular)  Diameter  Direct Proof  Equilateral Triangle  Independence  Indirect Proof  Isosceles Triangle  Line  Median  Midpoint  Non-rigid Transformation  Obtuse Angle  Parallel  Parallelogram  Perimeter  Perpendicular  Point  Polyhedra  Proof  Proof by Contradiction  Pyramid (Right)  Pythagorean Identity  Pythagorean Theorem  Radius  Ray  Rectangle  Regular Polygon  Rhombus  Right Triangle  Rigid Transformation  Scalene Triangle  Secant  Sector  Segment  Semicircle  Similarity  Slope  Sphere  Square  Supplementary Angles  Surface Area  Tangent  Three-Dimensional  Trapezoid  Trigonometric Ratios  Two-Dimensional  Vertical Angles  Volume |
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| **GEO** | Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization. | How are spatial relationships, including shape and dimension, used to draw, construct, model, and represent real situations or solve problems?  How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving? | Measurement and Dimension | Use and/or compare measurements of angles.  Use and/or develop procedures to determine, describe, or estimate measures of perimeter, circumference, area, surface area, and/or volume.  Describe how a change in the linear dimension can affect perimeter, circumference, area, surface area, and/or volume.  Visualize the relation between two-and three-dimensional objects.  Apply geometric concepts in modeling situations. | CC.2.3.HS.A.3 CC.2.3.HS.A.8 CC.2.3.HS.A.9 CC.2.3.HS.A.12 CC.2.3.HS.A.13 CC.2.3.HS.A.14 | G.2.2.1.1 G.2.2.1.2 G.2.2.2.1 G.2.2.2.2 G.2.2.2.3 G.2.2.2.4 G.2.2.2.5 G.2.2.3.1 G2.3.1.1 G2.3.1.2 G2.3.1.3 G2.3.2.1 |  |