

BERTHA-HEWITT HIGH SCHOOL
Fall /Spring Semester Curriculum Map – 2014-15
Peggy Leitch – Instructor

Academic Standard Area: **Math**

Course Title/Strand: **Geometry**

Grade Level: **9-12**

Textbook & Copyright date: **McDougal Littell, Geometry 2007**

CONTENT/UNIT/SUB-STRAND	PROCESS/ACTIVITY/STANDARD	TEST DATE
Chapter 1 – Essentials of Geometry	Points, Lines, Planes; Segments & Congruence; Midpoints & Distance Formulas; Classifying Angles; Describe Angle Pair Relationships; Classify Polygons; Perimeter, Circumference, & Area	September
Chapter 2 – Reasoning and Proof	Inductive Reasoning; Conditional Statements; Deductive Reasoning; Postulates; Properties from Algebra; Prove Statements about Segments & Angles; Prove Angle Pair Relationships	October
Chapter 3 – Parallel and Perpendicular Lines	Identify Pairs of Lines and Angles; Use Parallel Lines and Transversals; Prove Lines are Parallel; Find and Use Slopes of Lines; Write and Graph Equations of Lines; Prove Theorems about Perpendicular Lines	November
Chapter 4 - Congruent Triangles	Apply Triangle Sum Properties; Apply Congruence and Triangles; Prove Triangles Congruent by SSS, SAS, HL, ASA, and AAS; Use Congruent Triangles, Isosceles & Equilateral Triangles; Perform Congruence Transformations	December
Chapter 5 - Relationships within Triangles	Midsegment Theorem & Coordinate Proof; Perpendicular Bisectors; Angle Bisectors; Medians & Altitudes; Inequalities in Triangles; Inequalities in Two Triangles and Indirect Proof	January
Chapter 6 - Similarity	Ratios, Proportions & Geometric Mean; Use Proportions to Solve Geometry Problems; Similar Polygons; Prove Triangles Similar by AA, SSS, & SAS; Proportionality Theorems; Perform Similarity Transformations	January
Chapter 7 – Right Triangles and Trigonometry	Pythagorean Theorem and its Converse; Similar Right Triangles; Special Right Triangles; Tangent, Sine, & Cosine Ratios; Solve Right Triangles	February
Chapter 8 – Quadrilaterals	Find Angle Measures in Polygons; Properties of Parallelograms, Rhombuses, Rectangles, Squares, Trapezoids, & Kites; Show that a Quadrilateral is a Parallelogram; Special Quadrilaterals	March
Chapter 9 – Properties of Transformations	Translate Figures using Vectors; Properties of Matrices; Reflections, Rotations, & Composite of Transformations; Symmetry; Dilations	March
Chapter 10 - Properties of Circles	Arc Measure; Properties of Tangents & Chords of Circles; Inscribed Angles and Polygons; Apply Other Angle Relationships in Circles; Segment Length in Circles; Write and Graph Equations of Circles	April
Chapter 11 - Measuring Length and Area	Area of Triangles, Parallelograms, Trapezoids, Rhombuses, and Kites; Perimeter and Area of Similar Figures; Circumference and Arc Length; Area of Circles and Sectors; Areas of Regular Polygons; Geometric Probability	April
Chapter 12 - Surface Area and Volume of Solids	Explore Solids; Surface Area and Volumes of Prisms, Cylinders, Pyramids, Cones, and Spheres; Explore Similar Solids	May