

Mt. Zion High School Curriculum Map

Name: Diehl Department: Math Subject: Geometry

Quarter	Essential Skills	Strategies and Activities	CC Standards	Assessments
3	<p>1. Students will use ratios to solve problems and formulate and test conjectures about properties of polygons based on explorations and concrete models</p> <p>2. Students will use and extend properties to explore and justify conjectures about geometric figures, use Pythagorean Theorem, identify and apply patterns from right triangles, apply trig ratios</p>	<p>1.a. Write ratios and solve proportions</p> <p>1.b. Use proportions to identify similar polygons and solve problems using properties of similar polygons</p> <p>1.c. Identify similar triangles using AA , SSS, SAS and solve problems</p> <p>1.d. Use proportional parts within triangles and parallel lines</p> <p>1.e. Recognize and use proportional relationships of similar triangles and use triangle angle bisector theorem</p> <p>1.f. Identify similarity transformations and verify similarity</p> <p>1.g. Interpret scale models and use scale factors to solve problems</p> <p>2.a. Find geometric mean and solve problems involving relationships of parts of right triangles</p>	<p>1.a.G.MG.3</p> <p>1.b. G.SRT.2</p> <p>1.c. G.SRT.4, G.SRT.5</p> <p>1.d. G.SRT.4, G.SRT.5</p> <p>1.e. G.SRT.4, G.SRT.5</p> <p>1.f. G.SRT.2, G.SRT.5</p> <p>1.g. G.MG.3</p> <p>2.a. G.SRT.4, G.SRT.5</p>	<p>Chapter 7 Quiz, Test, semester exam</p>

Quarter	Essential Skills	Strategies and Activities	CC Standards	Assessments
3	2.cont	<p>2.b. Use the Pythagorean theorem and its converse</p> <p>2.c. Use properties of 45-45-90 and 30-60-90 triangles</p> <p>2.d. Find trig ratios using right triangles and find angle measures using trig</p> <p>2.e. Solve problems involving angles of elevation and depression</p> <p>2.f. Use Law of Sines and cosines to solve triangles</p> <p>2.g. Find magnitudes, directions, add and subtract vectors</p>	<p>2.b. G.SRT.8, G.MG.3</p> <p>2.c. G.SRT.6</p> <p>2.d. G.SRT.6, G.SRT.7</p> <p>2.e. G.SRT.8</p> <p>2.f. G.SRT.9, G.SRT.10</p> <p>2.g. G.GPE.6</p>	Chapter 8 Quiz, Test, Semester Exam
3	3. Students will use congruence transformations to make conjectures and justify properties of geometric figures	<p>3.a. Draw reflections</p> <p>3.b. Draw translations</p> <p>3.c. Draw rotations</p> <p>3.d. Draw compositions of isometries</p>	<p>3.a. G.CO.4, G.CO.5</p> <p>3.b. G.CO.4, G.CO.5</p> <p>3.c. G.CO.4, G.CO.5</p> <p>3.d. G.CO.2, G.CO.5</p>	

Quarter	Essential Skills	Strategies and Activities	CC Standards	Assessments
3	3.cont	<p>3.e. Identify line, rotational, plane and axis symmetries</p> <p>3.f. Draw dilations</p>	<p>3.e. G.CO.3</p> <p>3.f. G.CO.2, G.SRT.1</p>	Chapter 9 Quiz, Test, Semester Exam
3 & 4	4.Students will find areas of sectors and arc lengths and use numeric and geometric patterns to make generalizations including properties of angles relationships in circles	<p>4.a. Identify and use parts of circles and solve problems using circumference</p> <p>4.b. Identify central angles, major arcs, minor arcs, semicircles and find their measures</p> <p>4.c. Recognize and use relationships between arcs and chords and diameters</p> <p>4.d. Find measures of inscribed angles and polygons</p> <p>4.e. Use properties of tangents and solve problems using circumscribed polygons</p> <p>4.f. Write equations of circles and graph circles</p>	<p>4.a. G.CO.1, G.C.1</p> <p>4.b. G.C.2, G.C.5</p> <p>4.c. G.C.2, G.MG.3</p> <p>4.d. G.C.2, G.C.3</p> <p>4.e. G.CO.12, G.C.4</p> <p>4.f. G.GPE.1, G.GPE.6</p>	Chapter 10 Quiz, Test, Semester Exam

Quarter	Essential Skills	Strategies and Activities	CC Standards	Assessments
4	<p>5. Students will find areas of regular polygons, circles, composite figures, sectors, and arc lengths</p> <p>6. Students will find areas and volumes of prisms, pyramids, cones, spheres, cylinders and composites of these figures</p>	<p>5.a. Find perimeters and areas of parallelograms and triangles</p> <p>5.b. Find areas of trapezoids, rhombi, and kites</p> <p>5.c. Find areas of circles and sectors</p> <p>5.d. Find areas of regular polygons and composite figures</p> <p>5.e. Find areas of similar figures using scale factors and find scale factors</p> <p>6.a. Draw isometric views of 3-d figures and investigate cross sections of 3-d figures</p> <p>6.b. Find lateral areas and surface areas of prisms and cylinders</p> <p>6.c. Find lateral and surface areas of pyramids and cones</p>	<p>5.a. G.GPE.6</p> <p>5.b. G.MG.3</p> <p>5.c. G.C.5, G.GMD.1</p> <p>5.d. G.MG.3</p> <p>5.e. G.MG.1</p> <p>6.a. G.GMD.4</p> <p>6.b. G.MG.3</p> <p>6.c. G.MG.1</p>	<p>Chapter 11 Quiz, Test, Semester Exam</p> <p>Chapter 12 Quiz, Test, Semester Exam</p>

Quarter	Essential Skills	Strategies and Activities	CC Standards	Assessments
4	6.cont 7. Students will understand samples spaces and calculate geometric probabilities	6.d. Find volumes of prisms and cylinders 6.e. Find volumes of pyramids and cones 6.f. Find surface area and volume of spheres 7.a. Find probabilities by using length and area	6.d. G.GMD.1, G.GMD.3 6.e.G.GMD.1, G.GMD.3 6.f.G.GMD.1, G.GMD.3 7.a.S.MD.7	Quiz