

Mt. Zion Junior High School Curriculum Map

Name: Roberts 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>

