Unit 2: Dilations, Similarity, and Introducing Slope			
Open Up Family Resource Link			
Lesson	Skill	Online Resources	Standard
1	Decide if one rectangle is a dilation of another rectangle. Use a center and a scale factor to describe a dilation.	https://www.youtube.com/watch?v=kX5VN85p5M4 https://mathbitsnotebook.com/Algebra1/FunctionGraphs/FNGTransformationDilation.html	8.G.A
2	Apply dilations to figures on a circular grid when the center of dilation is the center of the grid.	https://teacher.desmos.com/activitybuilder/custom/561498911de0cf37102ab0f6	8.G.A
3	Apply a dilation to a polygon using a ruler.	https://www.youtube.com/watch?v=sHeJicVgQ78 https://www.youtube.com/watch?v=WqsL4KF-hkc https://www.youtube.com/watch?v=ehBP7uwPXm8	8.G.A
4	Apply dilations to figures on a rectangular grid. Determine the side and angle measures of a dilated figure after a given scale factor.	https://www.khanacademy.org/math/basic-geo/basic-geo-transformations-congruence/basic-geo-dilations/v/dilating-points-example https://www.ixl.com/math/grade-8/dilations-graph-the-image	8.G.A.3, 8.G.A
5	Dilate a figure by its vertices on a coordinate grid.	https://www.khanacademy.org/math/basic-geo/basic-geo-transformations-congruence/basic-geo-dilations/v/thinking-about-dilations https://www.ixl.com/math/grade-8/dilations-find-the-coordinates	8.G.A.3, 8.G.A
6	Apply a sequence of transformations to one figure to get a similar figure. Use a sequence of transformations to explain why two figures are similar.	https://www.khanacademy.org/math/basic-geo/basic-geo-transformations-congruence/congruent-similar/v/testing-similarity-through-transformations https://www.ixl.com/math/geometry/similar-triangles-and-similarity-transformations	8.G.A.2, 8.G.A.4
7	Know the relationship between angle measures and side lengths in similar polygons. Use angle measures and side lengths to conclude that two polygons are not similar.	https://www.khanacademy.org/math/basic-geo/basic-geo-transformations-congruence/congruent-similar/v/comparing-side-lengths-after-dilation https://www.ixl.com/math/grade-7/side-lengths-and-angle-measures-of-similar-figures https://www.ixl.com/math/geometry/identify-similar-figures	8.G.A.2, 8.G.A.4
8	Decide if two triangles are similar just by looking at their angle measures.	https://www.mathopenref.com/similaraaa.html	8.G.A, 8.G.A.5

		https://www.youtube.com/watch?v=Guf49aOi0SQ	
9	Find missing side lengths in a pair of similar triangles using quotients of side lengths. Decide if two triangles are similar by looking at quotients of lengths of corresponding sides.	https://www.youtube.com/watch?v=XLwmsUK1aJA https://www.youtube.com/watch?v=gQoNjgayoLI https://www.ixl.com/math/algebra-1/similar-triangles-and-indirect-measurement	8.G.A, 8.G.A.4
10	Draw a line on a grid with a given slope. Find the slope of a line on a grid.	https://www.geogebra.org/m/UxvbFxVQ https://www.khanacademy.org/math/algebra/two-var-linear-equations/slope/v/introduction-to-slope https://www.geogebra.org/m/fBNyQDYq https://www.ixl.com/math/grade-8/find-the-slope-of-a-graph https://www.ixl.com/math/grade-7/graph-a-line-using-slope	8.EE.B.6
11	Decide whether a point is on a line by finding quotients of horizontal and vertical distances.	https://www.khanacademy.org/math/algebra/two-var-linear-equations/writing-slope-intercept-equations/v/graphs-using-slope-intercept-form	8.EE.B.6, 8.G.A
12	Find an equation for a line and use that to decide which points are on that line.	https://www.khanacademy.org/math/algebra/two-var-linear-equations/writing-slope-intercept-equations/v/graphs-using-slope-intercept-form https://www.ixl.com/math/grade-8/find-the-slope-from-two-points https://www.ixl.com/math/grade-8/graph-a-line-using-slope https://www.ixl.com/math/grade-8/graph-a-line-from-an-equation-in-slope-intercept-form https://www.ixl.com/math/grade-8/write-a-linear-equation-from-a-graph https://www.ixl.com/math/grade-8/write-a-linear-equation-from-two-points	8.EE.B.6, 8.G.A, 8.G.A.3