

The UbD Template, Version 2.0

Time Frame: 17 lessons	Title: Unit 1: Rigid Transformations & Congruence	Course Name: Grade 8
Stage 1 - Desired Results		
Established Goals Standards: 8.G.1 verify experimentally the properties of rotations, reflections, and translations: a.Lines are taken to lines, and line segments to line segments of the same length. b. Angles are taken to angles of the same measure. c. Parallel lines are taken to parallel lines. 8.G.2-UNDERSTAND that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, DESCRIBE a sequence that exhibits the congruence between them. 8.G.A.3- DESCRIBE the effect of dilations, translations, rotations, and reflections on two-dimensional figures USING coordinates 8.G.A.5-USE informal arguments to ESTABLISH facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	Transfer	
	Students will be able to independently use their learning to... apply rotation, reflection, translation, and dilation of geometric shapes setting the foundation of geometry to solve real-world problems.	
	Meaning	
	UNDERSTANDINGS Students will understand that.... Summarize unit -Understand how to perform rigid transformations on a coordinate plane -Understand how the properties of rigid transformations effect an image. -Understand rigid transformations create congruent figures -Understand the relationships between angles and lines in figures.	ESSENTIAL QUESTIONS: What happens when you transform figures on the coordinate plane? When could a transformation create a non-congruent figure?
	Acquisition	
	Students will know... The difference between translations, rotations, and reflections How to determine a missing angle measure, If I have a pair of vertical angles and know the angle measure of one of them	Students will be (able) skilled at... Identify corresponding points before and after a transformation Use coordinate grids to carry out transformations of figures Describing transformations using the terms translation, rotation, and reflection precisely

	Whether or not two figures are congruent. using rigid transformations Vocabulary: • Translations • Rotations • Reflections • Corresponding • Rigid Transformations • Vertices Students will understand that.... Whether or not two figures are congruent. using rigid transformations.	
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