

Unit 1: Rigid Transformations and Congruence

Block	Original Lessons	Plan to Do	If Time Allows	Notes
1	Check Your Readiness Lesson 1 Moving in the Plane	CYR 1.1 1.2 1.3 Lesson 1 Synthesis 1.4		Activity 1.1 is the first time the Which One Doesn't Belong routine is used in this course.
2	Lesson 2 Naming the Moves Lesson 3 Grid Moves	2.1 2.2 2.3 Lesson 2 Synthesis 3.1 3.2* Lesson 3 Synthesis 3.3	2.2	In this block, students examine translations, rotations, and reflections of objects and work towards more precise language to describe each of the moves. Activity 3.1 is the first time the Notice and Wonder routine is used in this course.
3	Lesson 4 Making the Moves Lesson 5 Coordinate Moves	5.1 4.2 4.3* 5.2 5.3 Lesson 5 Synthesis 5.4	4.1	Activity 4.3 is the first time the Anticipate, Monitor, Select, Sequence, Connect routine is used in this course.





Grade 8 Block Schedule Guidance

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4	Lesson 6 Describing Transformations	6.1 6.2* Lesson 6 Synthesis 6.3		Students use the Info Gap routine to ask essential questions about transformations in order to solve problems. Activity 6.2 is the first time the Info Gap routine is used in this course.
5	Lesson 7 No Bending or Stretching Lesson 8 Rotation Patterns	8.1 7.2 7.3 8.2 8.3* Lesson 7 Synthesis 7.4	7.1	The focus for this block is that rigid transformations do not change the length of segments or the measure of angles.
6	Lesson 9 Moves in Parallel Lesson 10 Composting Figures	9.1 9.2 9.3* 10.2 10.3 Lesson 9 Synthesis 10.5	10.1 10.4 (optional)	This sequence of activities explores a proof of the vertical angle theorem then looks at lengths and angles on composite shapes created by using rigid transformations on geometric objects.





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7	Mid-Unit Assessment Lesson 11 What Is the Same?	MUA 11.1 11.2 11.3 Lesson 11 Synthesis 11.4		Give the Mid-Unit Assessment at the beginning of the block.
8	Lesson 12 Congruent Polygons Lesson 13 Congruence	13.1 12.2* 12.3 13.2 13.3 Lesson 13 Synthesis 12.5	12.1 12.4 (optional) 13.4 (optional)	Congruence using sequences of rigid transformations is the focus of this block. The concept is shown first with polygons, then with shapes that have curves.
9	Lesson 14 Alternate Interior Angles Lesson 15 Adding the Angles in a Triangle	14.1 14.2 14.3* Lesson 14 Synthesis 15.3 Lesson 15 Synthesis 14.4	15.1 15.2 (optional)	This block focuses on angles. First, students examine angles created by a transversal line cutting across two parallel lines. They see the congruence of alternate interior angles using a rigid transformation and can use vertical angles and adjacent, supplementary angles to find the relationship to the other angles. Then they begin to look at angles in triangles to see that their sum is 180°. The cool-down focuses on the material from the first half of the block. The next block will provide an opportunity for students to demonstrate their understanding of the triangle angle sum theorem.





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10	Lesson 16 Parallel Lines and the Angles in a Triangle Lesson 17 Rotate and Tessellate	17.1 16.2 16.3* Lesson 16 Synthesis 17.2 or 17.3 16.5	16.1 16.4 (optional)	The final block of the unit examines a proof of the triangle angle sum theorem then gives students an opportunity to play with transformed figures more artistically. Due to time restrictions, it may be best to allow student pairs to select either the tesselation or rotational symmetry activity to work through. The optional activity can be given as practice for finding unknown angles in a figure.
11	End-of-Unit Assessment	EUA		

Unused cool-downs: 2.4, 4.4, 8.4, 9.4, 13.5, 15.4