

Unit 6 Common Core State Standards

<p>6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6.G.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = L \times W \times H$ and $V = B \times H$ to find the volume of right rectangular prisms.</p>	<p>6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>
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Unit 6 Essential Questions:

- *What are the Similarities and differences of finding the area and perimeter of a 2-dimensional shape compared to the volume and surface area of a 3-dimensional shape?*
- *What strategies can be used to find the area of non-regular shapes?*

Number Sense:

- *Odd one out*
- *Always, Sometimes, Never*

Monday-Wednesday NWEA TESTING: MATH

Thursday Engage NY Lesson 7

Objective: Students use absolute value to determine distance between integers on the coordinate plane in order to find the side lengths of polygons.

Agenda:

1. Warm up: Ways to Make a Number AND Video:
2. Classwork: Engage NY Lesson 7 Exercises and Stations
3. Homework: Engage NY Lesson 7 Problem Set/Homework
4. Exit Ticket

Friday Engage NY Lesson 8

Objective: Given coordinates for the vertices, students draw polygons in the coordinate plane. Students find the area enclosed by the polygon by composing or decomposing using polygons with known area formulas.

Agenda:

1. Warm up: Ways to Make a Number AND Video:
2. Classwork: Engage NY Lesson 8 Examples 1-5 and Exercises 1-4
3. Homework: Engage NY Lesson 8 Problem Set/Homework

Mrs. Rayman's Daily Instructional Plan- Grade 6 Math

	Monday	Tuesday	Wednesday	Thursday	Friday
Accessing Prior Knowledge - <i>Where</i> are your students headed? Where have they been? How will you make sure the students know where they are going?				Warm up: Ways to Make a Number of the Day AND Video:	Warm up: Ways to Make a Number of the Day AND Video:
Guided Practice - What events will help students <i>experience and explore</i> the big idea and questions in the unit? How will you equip them with needed skills and knowledge?				Direct Instruction: Engage NY Lesson 7 Examples 1-8	Direct Instruction: Engage NY Lesson 8 Examples 1-8
Independent Practice - How will you cause students to <i>reflect and rethink</i> ? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all?	NWEA TESTING	NWEA TESTING	NWEA TESTING	Student Notes and Homework: Engage NY Lesson 7 Problem Set/Homework	Student Notes and Homework: Engage NY Lesson 8 Problem Set/Homework
Assessing Knowledge - How will you help students to <i>exhibit and self-evaluate</i> their growing skills, knowledge, and understanding throughout the unit?				Exit Tickets and Teacher Observations	Exit Tickets and Teacher Observations
Differentiation/Accommodation - How will you <i>tailor</i> and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit?				Pre written vocabulary & notes, extended time, preferential seating, reduced assignments	Pre written vocabulary & notes, extended time, preferential seating, reduced assignments
Learner Outcome - How will students <i>demonstrate</i> , as a result of lesson, their level of mastery? <ul style="list-style-type: none"> • Understand • Know • Do 				Students use absolute value to determine distance between integers on the coordinate plane in order to find the side lengths of polygons. e.	Given coordinates for the vertices, students draw polygons in the coordinate plane. Students find the area enclosed by the polygon by composing or decomposing using polygons with known area formulas.

Unit 7 Common Core State Standards

7.NS.1 Apply and extend previous understanding of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	7.NS.1a Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.	7.NS.2b Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers is a rational number.
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Unit 7 Essential Questions:

- *What rules can we find to generalize patterns when operations with rational numbers? What connections can we make to operations with whole numbers, fractions and decimals?*
- *How are rational number operations useful in the real world?*

Number Sense:

- *Count around the room*
- *Ways to make a number*
- *Ways to solve a math problem mentally*
- *Organic number line*

Monday-Wednesday NWEA TESTING: MATH

Thursday Unit 7 REVIEW/ TEST

Friday Engage NY Lesson 3-16

Objective: Students develop the definition of a circle using diameter and radius. Students know that the distance around a circle is called circumference and discover that the ratio of the circumference to the diameter of a circle is a special number called pi. Students know the formula for the circumference C of a circle, of diameter d , and radius r . They use scale models to derive these formulas.

1. Warm up: Ways to Make a Number AND Video:
2. Classwork: Engage NY Lesson 3-16 Examples and Exercises
3. Homework: Engage NY Lesson 3-16 Problem Set/Homework

Mrs. Rayman's Daily Instructional Plan- Grade 6 Advanced Math

	Monday	Tuesday	Wednesday	Thursday	Friday
Accessing Prior Knowledge - Where are your students headed? Where have they been? How will you make sure the students know where they are going?					Warm up: Ways to Make a Number of the Day AND Video: :
Guided Practice - What events will help students experience and explore the big idea and questions in the unit? How will you equip them with needed skills and knowledge?				ADVANCED UNIT 7: TEST	Direct Instruction: Engage NY Lessons 3-16
Independent Practice - How will you cause students to reflect and rethink ? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all?	NWEA TESTING	NWEA TESTING	NWEA TESTING		Student Notes and Homework: Engage NY Lesson 3-16 Problem Set/Homework
Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit?					Exit Tickets and Teacher Observations
Differentiation/Accommodation - How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit?					Pre written vocabulary & notes, extended time, preferential seating, reduced assignments
Learner Outcome - How will students demonstrate , as a result of lesson, their level of mastery? <ul style="list-style-type: none"> ● Understand ● Know ● Do 					Students develop the definition of a circle using diameter and radius. Students know that the distance around a circle is called circumference and discover that the ratio of the circumference to the diameter of a circle is a special number called pi. Students know the formula for the circumference C of a circle, of diameter d, and radius r. They use scale models to derive these formulas.