

The purpose of this tool is to help educators understand each of the grade level standards and how those standards connect to the students' overall preparation for college and career readiness.

The NMIS is a teacher-influenced tool, designed to provide instructional planning support at the programmatic level for districts and instructional level for teachers. Its foundation stems from the vision and mission of the PED and came into existence to assure that students in NM will be engaged in a culturally and linguistically responsive educational system that meets the social, emotional, and academic needs of ALL students. This is also rooted in the belief that all students must have access to on-grade-level standards, focusing on acceleration. The purpose of this tool is to help educators understand each of the grade level standards and how those standards connect to the students' overall preparation for college and career readiness.

Standards are defined as the most critical prerequisite skills and knowledge. This document is color-coded to reflect both anchor and priority standards. Though previous emphasis was placed on priority standards to address lost learning due to COVID-19, New Mexico teachers should note that moving forward, while priority standards allow for acceleration of learning, all standards should be addressed in instruction throughout the school year.

In this guide you will find:

- A [breakdown](#) of each of the grade level standards within the cluster, including:
 - Standards of Mathematical Practice
 - Common Misconceptions
 - Identification of Priority Standards, as identified by NMPED.
 - Level of Rigor Identification
- Sample aligned [assessment](#) items
- [Suggested Student Discourse Guide](#)
- A [multilayered system of supports \(MLSS\) and culturally and linguistically responsive instruction \(CLR\) guide](#)

Key		
	<i>Priority Standard</i>	Priority standards, as identified by NMPED, are denoted with red highlighting. Priority standards are the most critical prerequisite skills and knowledge a student needs. This does not mean that these are only standards required to be taught, just these are the standards that will allow for the acceleration the students of New Mexico need during this time.
	<i>Conceptual Understanding</i>	Conceptual Understanding standards help students build a deep understanding of the how and why of mathematics.
	<i>Application</i>	Application standards help students identify the appropriate concepts and skills to tackle novel real-world problems .
	<i>Procedural Skill and Fluency</i>	Procedural standards help students develop efficiency and accuracy in computations.

Standards Breakdown

- Draw construct and describe geometrical figures and describe the relationships between them
 - [7.G.A.1](#)
 - [7.G.A.2](#)
 - [7.G.A.3](#)
- Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
 - [7.G.B.4](#)
 - [7.G.B.5](#)
 - [7.G.B.6](#)

Grade	CCSS Domain	CCSS Cluster
7	GEOMETRY	Draw construct and describe geometrical figures and describe the relationships between them
 Cluster Standard: 7.G.A.1		
Standard		Standards for Mathematical Practice
<p>Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>		<ul style="list-style-type: none"> ● SMP 2: Reason abstractly and quantitatively. ● SMP 4: Model with mathematics.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● Students work to draw and construct geometric shapes, particularly triangles from given angle and side measurements. Students find relationships and connections between a 3D figure and slicing it into a plane figure. Students use scale drawings to find the actual lengths from scale drawing or redrawing a scale drawing to another scale 		<ul style="list-style-type: none"> ● Solve problems involving scale drawings. ● Calculate length and area from scale drawings. ● Reproduce a scale drawing at a different scale.
DOK		Blooms
1-2		Remember, Understand

Grade	CCSS Domain	CCSS Cluster
7	GEOMETRY	Draw construct and describe geometrical figures and describe the relationships between them
 Cluster Standard: 7.G.A.2		
Standard		Standards for Mathematical Practice
Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.		<ul style="list-style-type: none"> ● SMP 5: Use appropriate tools strategically.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● Students work to draw and construct geometric shapes, particularly triangles from given angle and side measurements. Students find relationships and connections between a 3D figure and slicing it into a plane figure. Students use scale drawings to find the actual lengths from scale drawing or redrawing a scale drawing to another scale 		<ul style="list-style-type: none"> ● Draw a geometric figure with given conditions. ● Explain why a set of given conditions does (or does not) produce the desired figure. ● Measure side lengths and angle measures with given tools.
DOK		Blooms
1-2		Remember, Understand

Grade	CCSS Domain	CCSS Cluster
7	GEOMETRY	Draw construct and describe geometrical figures and describe the relationships between them
 Cluster Standard: 7.G.A.3		
Standard		Standards for Mathematical Practice
Describe the two-dimensional figures that result from slicing three dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.		<ul style="list-style-type: none"> ● SMP 6: Attend to precision. ● SMP 8: Look for and express regularity in repeated reasoning.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● Students work to draw and construct geometric shapes, particularly triangles from given angle and side measurements. Students find relationships and connections between a 3D figure and slicing it into a plane figure. Students use scale drawings to find the actual lengths from scale drawing or redrawing a scale drawing to another scale 		<ul style="list-style-type: none"> ● Identify the two-dimensional cross-sections that are formed by slicing three-dimensional figures. ● Describe the resulting face shape from cuts made parallel and perpendicular to the bases of right rectangular prisms and pyramids.
DOK		Blooms
1-3		Understand, Apply, Analyze

Common Misconceptions

- To minimize errors, have students use graph paper to make their scale drawings. Students without a solid grasp of measurement units such as those for area, will have difficulty with this standard, as will students who need more help with proportional reasoning. Use the opportunity to measure the classroom or other hands-on measurements to reinforce measurement units for those students.

Grade	CCSS Domain	CCSS Cluster
7	GEOMETRY	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
 Cluster Standard: 7.G.B.4		
Standard		Standards for Mathematical Practice
Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.		<ul style="list-style-type: none"> ● SMP 1: Make sense of problems and persevere in solving them.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● Students work on geometric problem solving. Students use basic information such as area, surface area, and volume formulas and facts about types of angles (supplementary, complementary, vertical, and adjacent) to solve real-world problems. 		<ul style="list-style-type: none"> ● Explain the relationships between radius and diameter. ● Explain that the ratio of circumference to diameter can be expressed as pi. ● Apply formulas to determine area, circumference, diameter, and radius of a circle to solve real-world problems. ● Solve real world problems involving circumference and area of a circle.
DOK		Blooms
1-2		Understand, Apply

Grade	CCSS Domain	CCSS Cluster
7	GEOMETRY	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
 Cluster Standard: 7.G.B.5		
Standard		Standards for Mathematical Practice
Use facts about supplementary, complementary, vertical, and adjacent angles in a multistep problem to write and solve simple equations for an unknown angle in a figure.		<ul style="list-style-type: none"> ● SMP 1: Make sense of problems and persevere in solving them. ● SMP 4: Model with mathematics.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● Students work on geometric problem solving. Students use basic information such as area, surface area, and volume formulas and facts about types of angles (supplementary, complementary, vertical, and adjacent) to solve real-world problems. 		<ul style="list-style-type: none"> ● Use understandings of angles (supplementary, complementary, vertical, adjacent) and deductive reasoning to write and solve equations. ● Write and solve equations based on a diagram of intersecting lines with some known angle measures. ● Justify angle measurements using facts about complementary, supplementary, vertical and/or adjacent angles.
DOK		Blooms
1-2		Understand, Apply

Grade	CCSS Domain	CCSS Cluster
7	GEOMETRY	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
 Cluster Standard: 7.G.B.6		
Standard		Standards for Mathematical Practice
Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.		<ul style="list-style-type: none"> ● SMP 1: Make sense of problems and persevere in solving them. ● SMP 4: Model with mathematics.
Clarification Statement		Students Who Demonstrate Understanding Can...
<ul style="list-style-type: none"> ● Students work on geometric problem solving. Students use basic information such as area, surface area, and volume formulas and facts about types of angles (supplementary, complementary, vertical, and adjacent) to solve real-world problems. 		Calculate the area, volume and surface area of two-dimensional and three-dimensional objects. <ul style="list-style-type: none"> ● Explain why the formula works and how the formula relates to the measure (area and volume) and the figure. ● Solve real-world problems involving geometry concepts such as area, volume, and surface area. ● Justify their solutions to problems involving area, volume, and surface area
DOK		Blooms
1-2		Apply

Common Misconceptions

- The formulas for the area of a circle and the circumference of a circle are often confused by students. Teaching students to memorize these formulas without any understanding of how they relate to a circle increases the chance for confusion. Build the understanding before presenting the formulas.

Student Discourse Guide

- **Purposeful, rich classroom discourse offers students the opportunity to express their ideas, thinking, and to critique the reasoning of others in a variety of ways (writing, drawing, verbal). Purposeful implementation of classroom discourse allows students to activate funds of knowledge and to refine their mathematical understanding. When students have frequent opportunities for discourse, they find various paths to solutions and reveal knowledge or misunderstandings to educators. The process also allows educators to honor students' culture, lived experiences and evolving math identities.**
- **Discourse that focuses on tasks that promote reasoning and problem solving is a primary mechanism for developing conceptual understanding and meaningful learning of mathematics (Michaels, O'Connor, and Resnick, 2008)**

Domain: Geometry	Strand: Draw construct and describe geometrical figures and describe the relationships between them
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Suggested Student Discourse Questions

<ul style="list-style-type: none"> ● What is the relationship between the ratios of side lengths and areas of geometric figures in scale drawings? ● How can we apply proportions when you draw a scale model? 	<ul style="list-style-type: none"> ● How do you apply scale drawing or similar figures in the real world? ● What is the difference and similarities between scale drawing and scale factors?
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Domain: Geometry	Strand: Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
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Suggested Student Discourse Questions

<ul style="list-style-type: none"> ● How do we find the circumference and area of a circle using the relationship between them? ● How do you verify the formula of surface area of solid with the net of the solid? 	<ul style="list-style-type: none"> ● How do we solve real-world and mathematical problems involving areas of two-dimensional objects composed of triangles, quadrilaterals, and polygons using area and surface area?
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|---|---|
| <ul style="list-style-type: none">• What are different ways to partition the given two-dimension objects (such as L-shape figure) to find the area? Verify if the strategies yield the same result. | <ul style="list-style-type: none">• Explain each part of the formula of surface area and what each part represents on the net of the solid. |
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ASSESSMENT GUIDE

- [Draw construct and describe geometrical figures and describe the relationships between them](#)
- [Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.](#)

Grade	CCSS Domain	CCSS Strand
7	GEOMETRY	Draw construct and describe geometrical figures and describe the relationships between them

Sample Task #1 (Constructed Response)

The two diagrams are scale drawings of the same room. In Diagram A, 1 centimeter represents 2 feet.

Diagram A

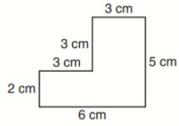
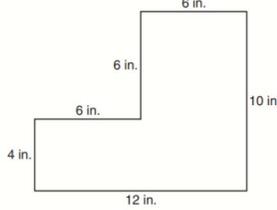


Diagram B

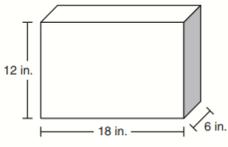
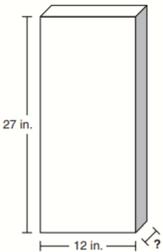
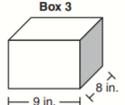
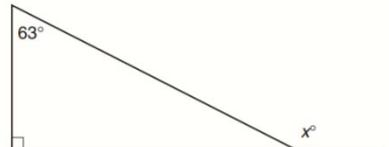


Key
1 centimeter represents 2 feet

What is the scale relationship for Diagram B?

Sample Task #2 (Multiple Choice)

Marcy draws a triangle. Two sides of the triangle each measure 15 inches. Which angle measurements could be the measures of two angles in Marcy's triangle?

Grade	CCSS Domain	CCSS Strand
7	GEOMETRY	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
Sample Task #1 (Constructed Response)		
<p data-bbox="259 651 971 682">. A company mails packages using three types of boxes shaped like rectangular prisms.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div data-bbox="402 688 630 850" style="text-align: center;"> <p>Box 1</p>  </div> <div data-bbox="657 688 820 955" style="text-align: center;"> <p>Box 2</p>  </div> </div> <div style="text-align: center; margin-top: 20px;"> <p>Box 3</p>  </div> <p data-bbox="272 987 560 1008">Boxes 1 and 2 have the same volume.</p> <p data-bbox="272 1012 868 1113"> a. What is the width of Box 2? Show your work or explain how you know. b. The surface area of Box 3 is 348 square inches. What is the volume of Box 3? Show your work or explain how you know. </p>		
Sample Task #2 (Multiple Choice)		
<p data-bbox="341 1312 747 1354">. Milo is building a bike ramp. He makes a diagram to model the bike ramp.</p> <div style="text-align: center;">  </div> <p data-bbox="354 1533 738 1585">Which equation could Milo use to find the value of x in the diagram?</p> <p data-bbox="354 1591 592 1701"> <input type="radio"/> A $180 - x = 180 - (90 + 63)$ <input type="radio"/> B $(63 + 90) + x = 180$ <input type="radio"/> C $x + 63 = 180$ <input type="radio"/> D $90 - x = 63$ </p>		

MLSS AND CLR GUIDE

- [Draw construct and describe geometrical figures and describe the relationships between them](#)
- [Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.](#)

CCSS Domain	CCSS Cluster
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Geometry	Draw construct and describe geometrical figures and describe the relationships between them
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Culturally and Linguistically Responsive Instruction

Relevance to Families and Communities	<p>During a unit focused on drawing, constructing, and describing geometrical figures and describe the relationships between them, consider options for learning from your families and communities the cultural and linguistic ways this mathematics exists outside of school to create stronger home to school connections for students, for example, learning about geometric shapes are used in cultural art and design connects the students’ home connections to the mathematical principles they are learning at school.</p>
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Cross-Curricular Connections	<p>Science: Model the Solar System at Scale</p> <p>Art: Geometric Drawings/ Architectural Drawing</p>
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Validate/Affirm/Build /Bridge	<ul style="list-style-type: none"> <i>How can you design your mathematics classroom to intentionally and purposefully legitimize the home culture and languages of students and reverse the negative stereotypes regarding the mathematical abilities of students of marginalized cultures and languages?</i> <i>How can you create connections between the cultural and linguistic behaviors of your students’ home culture and language, the culture and language of school mathematics to support students in</i> 	<ul style="list-style-type: none"> Facilitating Meaningful Mathematical Discourse: Mathematics discourse requires intentional planning to ensure all students feel comfortable to share, consider, build upon and critique the mathematical ideas under consideration. When student ideas serve as the basis for discussion, we position them as knowers and doers of mathematics by using equitable talk moves students and attending to the ways students talk about who is and isn’t capable of mathematics we can disrupt the negative images and stereotypes around mathematics of marginalized cultures and languages. “A discourse-based mathematics classroom provides stronger access for every student — those who have an immediate answer or approach to share, those who have begun to formulate a mathematical approach to a task but have not fully developed their thoughts, and those who may not have an approach but can provide feedback to others.” For example, when studying drawing, constructing, and describing geometrical figures and describing the relationships between
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	<p><i>creating mathematical identities as capable mathematicians that can use mathematics within school and society?</i></p>	<p>them facilitating meaningful mathematical discourse is critical because the standards are asking students to solve, create and describe geometric figures which lends itself to providing opportunities to purposely plan discourse for students to share their ideas and methods. In that discourse utilizing protocols that validate students' contributions connected with home culture and home language will lower students' affective filters and allow them to take risks. The protocols need to be created in a way that removes teacher's, often unknowingly, biases. These protocols should provide students opportunities to rehearse their ideas in a small group or team and then a random process of calling on students to share their thinking to the class. This affirms that all contributions are wanted and needed to build the knowledge of the whole. These types of processes affirm students that their home cultures and languages are positive assets as their contributions become a part of the curriculum. How we set up this process 41 6 is crucial. We need to have direct conversations about how different cultures talk, show body language, respond, etc. so students develop a class culture that is open and affirming.</p>
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Planning for Multi-Layered System of Supports

Vertical Alignment

<i>Previous Learning</i>	<i>Current Learning</i>	<i>Future Learning</i>
<ul style="list-style-type: none"> In 5th grade, learners classify two dimensional figures in a hierarchy based on properties. In 6th grade, learners understand and solve ratios and rates, generate equivalent ratios, and use ratios and rates to solve problems. In 6th grade, learners calculate perimeter & area of two-dimensional figures and find volume of 3D figures. In 6th grade, students explore the characteristics of a right rectangular prism and rectangular 	<ul style="list-style-type: none"> In 7th grade, learners can expand their work with expressions and equations as they write and solve equations related to similar figures, scale drawings, and the missing angle measures of triangles. In 7th grade, learners' work with similar figures supplements the concepts they have already learned (or will be learning) when studying direct variation and proportional reasoning. 	<ul style="list-style-type: none"> In 8th grade, learners connect their previous understanding of similar figures with the properties of translations, rotations, reflections and dilations. In 8th grade, learners build on their experimentation with triangles and start to make informal arguments about their properties, such as angle sum, exterior angles of a triangle, and angles created when parallel lines are cut by a transversal line. In 8th grade, learners build on

pyramid		knowledge of triangle side lengths which leads to the investigation of the Pythagorean Theorem and its converse.
Suggested Instructional Strategies		
Pre-Teach		
<i>Level of Intensity</i>	<i>Essential Question</i>	<i>Examples</i>
Targeted	<i>What pre-teaching will prepare students to productively struggle with the mathematics for this cluster within your HQIM?</i>	During a unit focused on drawing, constructing, and describing geometrical figures and describe the relationships between them, consider options for learning from your families and communities the cultural and linguistic ways this mathematics exists outside of school to create stronger home to school connections for students, for example, learning about geometric shapes are used in cultural art and design connects the students' home connections to the mathematical principles they are learning at school.
Intensive	<i>What critical understandings will prepare students to access the mathematics for this cluster?</i>	<i>5.NF.B.4: This standard provides a foundation for work with solving problems involving scale drawings of geometric figures because students will do best if they have procedural fluency with their use of fractions with operations. If students have unfinished learning within this standard, based on assessment data, consider ways to provide intensive pre-teaching support prior to the start of the unit to ensure students are ready to access grade level instruction and assignments.</i>
Re-Teach		
<i>Level of Intensity</i>	<i>Essential Question</i>	<i>Examples</i>
Targeted	What formative assessment data (e.g., tasks, exit tickets, observations) will help identify content needing to be revisited during a unit?	Examine assessments for evidence of lingering misconceptions (see common misconceptions). If students exhibit one more of these misconceptions, consider addressing the misconception by re-engaging with content during a unit on drawing, constructing, and describing geometrical figures and describing the relationships between them by clarifying mathematical ideas and/or concepts 5 through a short mini-lesson because when students explain their thinking and have time to process their learning misconceptions or gaps in

		learning can be addressed.
Intensive	What assessment data will help identify content needing to be revisited for intensive interventions?	Examine assessments for evidence of students still developing the underlying ideas. For example, some students may benefit from intensive extra time during and after a unit to drawing, constructing, and describing geometrical figures and describing the relationships between them by helping students move from specific answers to generalizations for certain types of problems because at times students can become too focused on the specific area within the cluster without stepping back to see the connection across the cluster, such as, students using a tool to measure the angles of triangles and are missing the larger connections of geometric principles across shapes for determining geometric conditions.
Extension		
<i>Essential Question</i>		<i>Examples</i>
What type of extension will offer additional challenges to 'broaden' your student's knowledge of the mathematics developed within your HQIM?		To extend students learning about drawing, constructing, and describing geometrical figures and describing the relationships between them, some learners may benefit from an extension such as open ended tasks linking multiple disciplines because students benefit when math understandings are applied to other areas of content and real-world application such as architecture, art, reconstructive surgery, etc.

<i>CCSS Domain</i>	<i>CCSS Cluster</i>
Geometry	Solve real-life and mathematical problems involving angle measure, area, surface area, and volume
Culturally and Linguistically Responsive Instruction	
Relevance to Families and Communities	During a unit focused on solving real-life and mathematical problems involving angle measure, area, surface area, and volume, consider options for learning from your families and communities the cultural and linguistic ways this mathematics exists outside of school to create stronger home to school connections for students, for example, learning about how geometry problems are used in real life to solve an issue like, purchasing a new air conditioner gives students a connection on different ways solving

	<p>real-life and mathematical problems involving angle measure, area, surface area, and volume are used in the home and community.</p>	
<p>Cross-Curricular Connections</p>	<p>Science and Technology: Science and math are intimately connected, particularly in fields such as chemistry, astronomy and physics. Students who can't master basic arithmetic skills will struggle to read scientific charts and graphs. More complex math, such as geometry, algebra and calculus, can help students solve chemistry problems, understand the movements of the planets and analyze scientific studies. Math is also important in practical sciences, such as engineering and computer science. Students may have to solve equations when writing computer programs and figuring out algorithms. Nursing majors may have great bedside manner. but they also need to know how to precisely calculate dosages to pass their courses.</p> <p>Social Studies: Social studies classes, such as history, often require students to review charts and graphs that provide historical data or information on ethnic groups. In geography classes, students might need to understand how the elevation of an area affects its population or chart the extent to which different populations have different average life spans. Knowledge of basic mathematical terms and formulas makes statistical information accessible</p> <p>Literature and Writing: Literature might seem like a far cry from math but mastering basic arithmetic can enable students to better understand poetry. The meter of poetry, the number of words to include in a line and the effect that certain rhythms have on the reader are all products of mathematical calculations. At a more mundane level, math can help students plan reading assignments in literature classes by discerning their average reading time and estimating how long it will take them to read a particular work. The linear, logical thinking used in mathematical problems can also help students write more clearly and logically.</p> <p>Art/Music: Students interested in pursuing careers in theater, music, dance or art can benefit from basic mathematical knowledge. Musical rhythm often follows complex mathematical series, and math can help students learn the basic rhythms of dances used in ballet and theater performances. Art thrives on geometry, and students who understand basic geometric formulas can craft impressive art pieces. Photographers use math to calculate shutter speed, focal length, lighting angles and exposure time.</p>	
<p>Validate/Affirm/Build /Bridge</p>	<ul style="list-style-type: none"> • <i>How can you design your mathematics classroom to intentionally and purposefully legitimize the home culture and languages of students and reverse the negative</i> 	<ul style="list-style-type: none"> • Using and Connecting Mathematical Representations: The standard for mathematical practice, use appropriate tools strategically, provides a strong foundation to validate and bridge for students. Mathematical representations are mathematical tools. The linguistic and cultural experiences of students provide different and varied

	<p><i>stereotypes regarding the mathematical abilities of students of marginalized cultures and languages?</i></p> <ul style="list-style-type: none"> • <i>How can you create connections between the cultural and linguistic behaviors of your students' home culture and language, the culture and language of school mathematics to support students in creating mathematical identities as capable mathematicians that can use mathematics within school and society?</i> 	<p>types of representations for solving mathematical problems. By explicitly encouraging students to use multiple mathematical representations students can draw on their “mathematical, social, and cultural competence”. By valuing these representations and discussing them we can connect student representations to the representations of school mathematics and build a bridge for students to position them as competent and capable mathematicians. For example, when studying Solving real-life and mathematical problems involving angle measure, area, surface area, and volume the use of mathematical representations within the classroom is critical because understanding how to read or interpret geometry drawings and the nomenclature for representations can allow students to draw on their experiences.</p>
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Planning for Multi-Layered System of Supports

Vertical Alignment

<i>Previous Learning</i>	<i>Current Learning</i>	<i>Future Learning</i>
<ul style="list-style-type: none"> • In 4th grade, students learned how to find the area of rectangles, special quadrilaterals, triangles, and polygons. In 6th grade, students began to explore volume, finding the volume of rectangular prisms, finding surface area using nets, and finding volume of rectangular prisms. 	<ul style="list-style-type: none"> • Throughout 7th grade, students will use their knowledge of angle measurements along with algebra to determine missing information about particular geometric figures. 	<ul style="list-style-type: none"> • In 8th grade, learners use the formulas from within this cluster to find the volume of cones, cylinders, and spheres.

Suggested Instructional Strategies

Pre-Teach

<i>Level of Intensity</i>	<i>Essential Question</i>	<i>Examples</i>
Targeted	<i>What pre-teaching will</i>	For example, some learners may benefit from targeted

	<i>prepare students to productively struggle with the mathematics for this cluster within your HQIM?</i>	pre-teaching that introduces new representations (e.g., scaled images) when studying Real-Life and Mathematical Problems Involving Angle Measure, Area, Surface Area, And Volume because students can use this skill to solve real-world mathematical problems.
Intensive	<i>What critical understandings will prepare students to access the mathematics for this cluster?</i>	<i>6.G.A.1: This standard provides a foundation for work with solving Real-Life and Mathematical Problems Involving Angle Measure, Area, Surface Area, And Volume because solving problems involving areas and volumes provide a context for developing and using equations. If students have unfinished learning within this standard, based on assessment data, consider ways to provide intensive pre-teaching support prior to the start of the unit to ensure students are ready to access grade level instruction and assignments.</i>
Re-Teach		
Level of Intensity	Essential Question	Examples
Targeted	What formative assessment data (e.g., tasks, exit tickets, observations) will help identify content needing to be revisited during a unit?	Examine assessments for evidence of lingering misconceptions (see common misconceptions). If students exhibit one more of these misconceptions, consider addressing the misconception by re-engaging with content during a unit on solving Real-Life And Mathematical Problems Involving Angle Measure, Area, Surface Area, And Volume by critiquing student approaches/solutions to make connections through a short mini-lesson because they can see multiple ways to solve a problem or reasons why a solution is incorrect or correct.
Intensive	What assessment data will help identify content needing to be revisited for intensive interventions?	Examine assessments for evidence of students still developing the underlying ideas some students may benefit from intensive extra time during and after a unit solving Real-Life And Mathematical Problems Involving Angle Measure, Area, Surface Area, And Volume by offering opportunities to understand and explore different strategies because they can see multiple ways to solve a problem or reasons why a solution is incorrect or incorrect and find new ways to approach a problem

Extension	
<i>Essential Question</i>	<i>Examples</i>
<p>What type of extension will offer additional challenges to 'broaden' your student's knowledge of the mathematics developed within your HQIM?</p>	<p>To extend students learning about. For example, some learners may benefit from an extension such as in-depth, self-directed exploration of self-selected topics when studying solving Real-Life and Mathematical Problems Involving Angle Measure, Area, Surface Area, And Volume because there are many applications of geometry in life that a student might have interest in, for example, building a treehouse.</p>