Unit 7 - Modeling with Equations & Measurement
9 days of Block instruction
These standards expand in all Units of Geometry to reinforce real-world phenomena.

Unit 7	Geometry: Concepts and Connections **Modeling with Equations and Measurement**	Considerations or scaffolds for Support
Day 1-2	**Standard(s)**: **G.GSR.9.1; G.MP; G.MM.1.1; G.MM.1.4** Use volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems including right and oblique solids **LT**: I am learning the volume formulas for three-dimensional right and oblique solids. **SC**: o I can use the formulas for volume of a prism, cylinder, pyramid, cone, and sphere. o I can use and explain Cavalieri's Principle to find the volume of oblique solids. o I can find the volume of composite solids to explain real-life phenomena.	Scaffolding throughout the lesson and applications will be provided for rigor. Students will work in pairs for turn and talk. Graphic organizers

| Day 3-4 | **Standard(s): G.GSR.9.1; G.MP; G.MM.1.1; G.MM.1.4**
Use volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems including right and oblique solids

LT:
I am learning the volume formulas for three-dimensional right and oblique solids.

SC:
o I can use the formulas for volume of a prism, cylinder, pyramid, cone, and sphere.
o I can use and explain Cavalieri's Principle to find the volume of oblique solids.
o I can find the volume of composite solids to explain real-life phenomena. | Scaffolding throughout the lesson and applications will be provided for rigor.

Students will work in pairs for turn and talk.

Graphic organizers |

| Day 5-6 | **Standard(s): G.GSR.9.1; G.PAR.2.3; G.MP; G.MM.1.1; G.MM.1.4**
 Use volume formulas for prisms, cylinders, pyramids, cones, and spheres to solve problems including right and oblique solids

 LT:
 I am learning to compare the volumes of various solids.

 SC: <br> o I can use the formulas for volume of a prism, cylinder, pyramid, cone, and sphere.
 o I can use and explain Cavalieri's Principle to find the volume of oblique solids.
 o I can find the volume of composite solids to explain real-life phenomena.

 o I can compare the volumes of various solids | Scaffolding throughout the lesson and applications will be provided for rigor.

 Students will work in pairs for turn and talk.

 Graphic organizers |

Day 7-8	**Standard(s): G.GSR.9.1; G.MP; G.MM.1.1; G.MM.1.4** Use geometric shapes, their measures, and their properties to describe objects and approximate volumes. **LT:** I am learning to compare the volumes of various solids. **SC**: o I can use the formulas for volume of a prism, cylinder, pyramid, cone, and sphere. o I can use and explain Cavalieri's Principle to find the volume of oblique solids. o I can find the volume of composite solids to explain real-life phenomena. o I can compare the volumes of various solids	Scaffolding throughout the lesson and applications will be provided for rigor. Students will work in pairs for turn and talk. Graphic organizers
Day 9-10	**Standard(s): G.GSR.9.2; G.PAR.2.3; G.MP; G.MM.1.1; G.MM.1.4** Use geometric shapes, their measures, and their properties to describe objects and approximate volumes. **LT**: o I am learning to describe objects and approximate the volume of geometric shapes. **SC**: o I can choose the appropriate geometric solid to approximate volumes of irregular objects.	Scaffolding throughout the lesson and applications will be provided for rigor. Students will work in pairs for turn and talk. Graphic organizers

Day 11-12	**Standard(s): G.GSR.9.2; G.PAR.2.3; G.MP; G.MM.1.1; G.MM.1.4** Use geometric shapes, their measures, and their properties to describe objects and approximate volumes. **LT**: o I am learning to describe objects and approximate the volume of geometric shapes. **SC**: o I can choose the appropriate geometric solid to approximate volumes of irregular objects.	

Day 13-14	**Standard(s): G.GSR.9.3; G.MM.1.1; G.MM.1.4**
	Apply concepts of density based on area and volume in modeling situations.
	
	LT:
	   o I am learning about density based on area and volume formulas.
	
	SC:
	   o I can choose the appropriate geometric figure or solid to approximate the density of irregular objects
	
	Lesson/Activity:
	Surface Area of rectangular/triangular prism and cylinder	

| Day 15-16 | **Standard(s): G.GSR.9.3; G.MM.1.1; G.MM.1.4**
Apply concepts of density based on area and volume in modeling situations.

LT:
   o I am learning about density based on area and volume formulas.

SC:
   o I can choose the appropriate geometric figure or solid to approximate the density of irregular objects | Scaffolding throughout the lesson and applications will be provided for rigor.

Students will work in pairs for turn and talk.

Graphic organizers |