

# Math 8, Unit 3: Geometry and Measurement

## Our Learning Goals:

### We will...

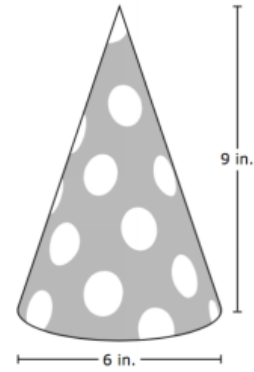
- ✓ Describe the volume formula of a cylinder in terms of its base and height.
- ✓ Model the relationship between the volume of a cylinder and a cone.
- ✓ Solve problems involving the volume of cylinders, cones and spheres.
- ✓ Determine solutions for lateral and total surface area of rectangular prisms, triangular prisms and cylinders.
- ✓ Use informal arguments to establish facts about angle relationships.

## Why do we study this?

- ❖ Students use formulas to find volume of various figures and learn to compare which will hold the smallest and largest amounts due to various dimensions.
- ❖ Students learn about angle relationships making connections to real-world applications such as roadway patterns: parallel roads, intersections, and perpendicular roads.

## How we will show what we have learned...

Formative Assessments	Summative Assessments
Ongoing formative assessments during lesson and homework activities will help in monitoring learning and providing feedback for students.	Summative assessments to measure learning at the end of concepts may include the following: <ul style="list-style-type: none"><li>• Tests: Angle/Pair Relationships, Surface Area &amp; Volume</li><li>• Unit 3 Exam (District Wide)</li></ul>



## Sample Problem:

A party hat is shaped like a cone. The dimensions of the party hat are shown in the diagram. Find the volume of the party hat.

## Additional Support:

- Check the teacher's Canvas page for notes, activities, and assignments.
- Search the topic on the web. We recommend using Khan Academy. [www.emsisd.com/khan](http://www.emsisd.com/khan)
- Attend tutorials.



Questions? Please contact your 8<sup>th</sup> grade math teacher.

--Your EM-S ISD 8<sup>th</sup> Grade Math Team