

# The Common Denominator

## A Family Math Newsletter

### Pre-Algebra Unit 5: Geometry and Measurement

#### Unit at a Glance

##### Skills/ Topics:

- Solve real-world and mathematical problems involving the circumference and area of circles.
- Give an informal derivation of the relationship between the circumference and area of a circle.
- Solve real-world and mathematical problems involving the area, volume, and surface area of two- and three-dimensional objects, including cones, cylinders, and spheres.
- Solve problems involving scale drawings of geometric figures.
- Construct triangles and determine when conditions determine a unique triangle, more than one triangle, or no triangle.
- Describe two-dimensional figures that result from slicing three-dimensional figures.

##### Length:

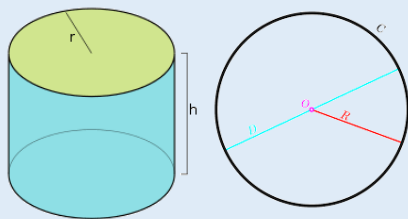
45 minutes: 21 days; 90 minutes: 10.5 days



## Exploring Mathematics

### Math Vocabulary:

Volume, vertex, surface area, supplementary, straight angle, scale factor, right angle, pyramid, proportion, plane, Pi, obtuse angle, linear pair, acute angle, adjacent angle, angle bisector, base, center, circle, circumference, cone, cross-section, cylinder, degrees, diameter, height, sphere



## Resource Toolkit

### HMH Resources

Module 8: Modeling Geometric Figures pg. 231-260  
Module 9: Circumference, Area, and Volume pg. 261-303  
Module 22: Volume pg. 691-719

### Discovery ED Techbook Info

Grade 7  
Proportional Reasoning and Scales concept 4.2  
Angles, Triangles, and Polygons concepts 10.1 and 10.3  
Circles concept 11.1  
Figures concept 12.1

### Homework Help Section

#### Open Up Resources

Units 1, 3, and 7 All Lessons and Practice Problems

[Khan Academy– Angle Types](#)

[Khan Academy– Circles](#)

[Khan Academy– Volume](#)

“Mathematics is the art of giving the same name to different things.”

- Henri Poincare