

Math 7



Angles, Triangles, and Prisms

Math 7 Curriculum

Power Objective

P.O. #7: Describe angle relationships, draw triangles, and solve problems involving cross sections, surface area, and volume. ([P.O.#7 Proficiency Rubric](#))

Academic Vocabulary

<input type="checkbox"/> net	<input type="checkbox"/> cylinder	<input type="checkbox"/> construct
<input type="checkbox"/> two-dimensional	<input type="checkbox"/> cone	<input type="checkbox"/> measure
<input type="checkbox"/> three-dimensional	<input type="checkbox"/> sphere	<input type="checkbox"/> explore
<input type="checkbox"/> perimeter	<input type="checkbox"/> height	<input type="checkbox"/> develop
<input type="checkbox"/> area	<input type="checkbox"/> base	<input type="checkbox"/> fill
<input type="checkbox"/> volume	<input type="checkbox"/> estimate	<input type="checkbox"/> wrap
<input type="checkbox"/> surface area	<input type="checkbox"/> dimension	<input type="checkbox"/> demonstrate
<input type="checkbox"/> trapezoid	<input type="checkbox"/> visualize	<input type="checkbox"/> describe
<input type="checkbox"/> prism	<input type="checkbox"/> calculate	

Enduring Understandings

Students understand that...

- Increasing volume does not necessarily mean the surface area is increasing.
- Volume can be thought of as “filling” an object and surface area can be thought of as “wrapping” the outside of an object. Both ideas can be used to inform decisions in the real world.

Essential Questions

- How much wrapping paper do you need to wrap a present?
- How can you change the dimensions of a cube or box to change surface area or volume.
- How can a piece of paper that is folded up have two different volumes? What quantities are involved in this problem?
- What am I being asked to calculate? (Surface area of volume)
- Is an exact answer required?
- What method should I use?
- What strategies for formulas might help?