

Learning Targets

Angles, Triangles, and Prisms

Lesson 1: Relationships of Angles

- I can find unknown angle measures by reasoning about adjacent angles with known measures.
- I can recognize when an angle measures 90° , 180° , or 360° .

Lesson 2: Adjacent Angles

- I can find unknown angle measures by reasoning about complementary or supplementary angles.
- I can recognize when adjacent angles are complementary or supplementary.

Lesson 3: Nonadjacent Angles

- I can determine if angles that are not adjacent are complementary or supplementary.
- I can explain what vertical angles are in my own words.

Lesson 4: Solving for Unknown Angles

- I can reason through multiple steps to find unknown angle measures.
- I can recognize when an equation represents a relationship between angle measures.

Lesson 5: Using Equations to Solve for Unknown Angles

- I can write an equation to represent a relationship between angle measures and solve the equation to find unknown angle measures.

Lesson 6: Building Polygons (Part 1)

- I can show that the 3 side lengths that form a triangle cannot be rearranged to form a different triangle.
- I can show that the 4 side lengths that form a quadrilateral can be rearranged to form different quadrilaterals.

Lesson 7: Building Polygons (Part 2)

- I can reason about a figure with an unknown angle.
- I can show whether or not 3 side lengths will make a triangle.

Lesson 8: Triangles with 3 Common Measures

- I understand that changing which sides and angles are next to each other can make different triangles.

Lesson 9: Drawing Triangles (Part 1)

- Given two angle measures and one side length, I can draw different triangles with these measurements or show that these measurements determine one unique triangle or no triangle.

Lesson 10: Drawing Triangles (Part 2)

- Given two side lengths and one angle measure, I can draw different triangles with these measurements or show that these measurements determine one unique triangle or no triangle.

Lesson 11: Slicing Solids

- I can explain that when a three dimensional figure is sliced it creates a face that is two dimensional.
- I can picture different cross sections of prisms and pyramids.

Lesson 12: Volume of Right Prisms

- I can explain why the volume of a prism can be found by multiplying the area of the base and the height of the prism.

Lesson 13: Decomposing Bases for Area

- I can calculate the the volume of a prism with a complicated base by decomposing the base into quadrilaterals or triangles.

Lesson 14: Surface Area of Right Prisms

- I can find and use shortcuts when calculating the surface area of a prism.
- I can picture the net of a prism to help me calculate its surface area.

Lesson 15: Distinguishing Volume and Surface Area

- I can decide whether I need to find the surface area or volume when solving a problem about a real-world situation.

Lesson 16: Applying Volume and Surface Area

- I can solve problems involving the volume and surface area of children's play structures.

Lesson 17: Building Prisms

- I can build a triangular prism from scratch.