

*Student Learning Objective: Students solve real-world and mathematical problems involving area, surface area, and volume.*

### ABOVE STANDARD

*Students are working to solidify the following skills:*

- Calculate area of rectangles on a coordinate plane.
- Calculate area of polygons with fractional dimensions.
- Calculate volume of rectangular prisms with three fractional dimensions.
- Calculate volume of figures composed of two rectangular prisms in multi-step word problems in a real world context.
- Calculate the distance between multiple points on a coordinate plane in multi-step word problems.
- Calculate surface area of shapes composed of triangles and rectangles using a net.
- Solve multi-step real world word problems involving surface area.

*Educator-recommended next steps and Digital Library resources*

Instructional next-steps include, helping students to:

- Model a real-life problem using multiplication and division of fractions, decimals and whole number. Digital Library Example: [The Doghouse Performance Task](#)
- Find the area of polygons by decomposing them into rectangles and triangles. Digital Library Example: [Finding the Areas of Polygons by Decomposing and Composing](#)
- Multiply mixed numbers. Digital Library Example: [Designing an Algorithm/Flow Chart for Multiplying Fractions](#)
- Use nets to calculate surface area. Digital Library Example: [Knowing Nets](#)

### AT/NEAR STANDARD

*Students are working to solidify the following skills:*

- Calculate the area of right triangles.
- Calculate area of polygons using single-digit whole numbers.
- Calculate volume of rectangular prisms with whole numbers and fractional parts.
- Draw parallelograms in the four quadrants of a coordinate plane given ordered pairs.
- Calculate distance between two points on a coordinate plane.
- Calculate surface area of a rectangular prism from a net.

*Educator-recommended next steps and Digital Library resources*

Instructional next-steps include, helping students to:

- Determine the area of a right triangle by using half of the area of a rectangle. Digital Library Example: [Area of Right Triangles](#)
- Recognize volume as 3-dimensional and different from area. Digital Library Example: [Designing Candy Cartons: Capacity and Surface Area Problem Solving](#)
- Apply concepts of area on the coordinate plane. Digital Library Example: [CCSS 6<sup>th</sup> Grade Explanations and Examples Flipbook](#)
- Investigate surface area of a triangular prism by analyzing its 3-dimensional attributes. Digital Library Example: [Knowing Nets](#)

### BELOW STANDARD

*Students are working to solidify the following skills:*

- Calculate area of parallelograms.
- Calculate volume of a rectangular prism.
- Draw rectangles on the coordinate plane using ordered pairs.
- Use four quadrants of coordinate plane.

*Educator-recommended next steps and Digital Library resources*

Instructional next-steps include, helping students to:

- Use the formula for the volume of a rectangular prism. Digital Library Example: [Introducing Volume as a Formula](#)
- Identify and graph points on a coordinate grid. Digital Library Example: [BattleGraph: Using " Battleship" to Graph Points in the Coordinate Plane](#)