

## Math 6+: Measurement

### Perimeter, Area, Surface Area, and Volume

## Problem Solving with Units

Students	Learning Continuum Statements:
Students:	<b>RIT 191-200:</b> <ul style="list-style-type: none"><li>Solves problems involving perimeters of rectangles within a real-world or mathematical context</li></ul>
Students:	<b>RIT 201-210:</b> <ul style="list-style-type: none"><li>Solves problems involving areas of rectangles within a real-world or mathematical context</li><li>Solves problems involving perimeters of rectangles within a real-world or mathematical context</li></ul>
Students:	<b>RIT 211-220:</b> <ul style="list-style-type: none"><li>Solves problems involving areas of rectangles within a real-world or mathematical context</li><li>Solves problems involving decimals and perimeters of non-rectangular polygons within a real-world or mathematical context</li><li>Solves problems involving decimals and perimeters of rectangles within a real-world or mathematical context</li><li>Solves problems involving perimeters of rectangles within a real-world or mathematical context</li><li>Solves problems involving rectangular prisms composed of unit cubes</li></ul>
Students:	<b>RIT 221-230:</b> <ul style="list-style-type: none"><li>Solves problems involving areas of figures composed of polygons within a real-world or mathematical context</li><li>Solves problems involving areas of rectangles within a real-world or mathematical context</li><li>Solves problems involving both area and perimeter of rectangles within a real-world or mathematical context</li><li>Solves problems involving decimals and perimeters of rectangles within a real-world or mathematical context</li><li>Solves problems involving perimeters of rectangles within a real-world or mathematical context</li><li>Solves problems involving volumes of rectangular prisms within a real-world or mathematical context</li></ul>
Students:	<b>RIT 231-240:</b> <ul style="list-style-type: none"><li>Solves problems involving areas of figures composed of polygons within a real-world or mathematical context</li><li>Solves problems involving areas of rectangles within a real-world or mathematical context</li><li>Solves problems involving both area and perimeter of rectangles within a real-world or mathematical context</li></ul>

- Solves problems involving decimals and perimeters of rectangles within a real-world or mathematical context
- Solves problems involving perimeters of rectangles within a real-world or mathematical context
- Solves problems involving volumes of rectangular prisms within a real-world or mathematical context

**Students:**

**RIT 241-250:**

- Solves area word problems involving tiling rectangles using unit squares with decimal side lengths
- Solves area word problems involving whole numbers and tiling rectangles with non-unit squares
- Solves problems involving areas of figures composed of polygons within a real-world or mathematical context
- Solves problems involving areas of polygons and circles, quarter circles, semicircles, or three-quarter circles within a real-world or mathematical context
- Solves problems involving both area and perimeter of rectangles within a real-world or mathematical context
- Solves problems involving perimeters of non-rectangular polygons within a real-world or mathematical context
- Solves problems involving perimeters of rectangles within a real-world or mathematical context
- Solves problems involving volumes of rectangular prisms within a real-world or mathematical context
- Uses the net of a prism to solve surface area problems within a real-world or mathematical context

**Students:**

**RIT 251-260:**

- Solves area word problems involving whole numbers and tiling rectangles with non-unit squares
- Solves problems involving areas of figures composed of polygons within a real-world or mathematical context
- Solves problems involving areas of polygons and circles, quarter circles, semicircles, or three-quarter circles within a real-world or mathematical context
- Solves problems involving surface areas of prisms within a real-world or mathematical context
- Solves problems involving volumes of rectangular prisms within a real-world or mathematical context

**Students:**

**RIT 261-270:**

- Solves problems involving areas of figures composed of polygons within a real-world or mathematical context
- Solves problems involving perimeters of quarter circles, semicircles, or three-quarter circles within a real-world or mathematical context
- Solves problems involving surface areas of prisms within a real-world or mathematical context
- Solves problems involving volumes of 3-D figures composed of cones, cylinders, and spheres within a real-world or mathematical context

- Solves problems involving volumes of cylinders within a real-world or mathematical context
- Solves problems involving volumes of rectangular prisms within a real-world or mathematical context

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**Students:****RIT 271-280:**

- Solves problems involving volumes of cones within a real-world or mathematical context
- Solves problems involving volumes of cylinders within a real-world or mathematical context

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**Students:****RIT 281-290:**

- Solves problems involving areas of circles within a real-world or mathematical context
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