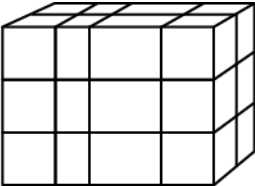
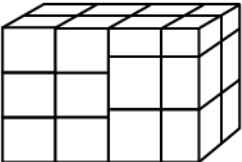
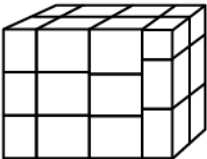
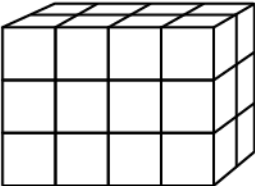
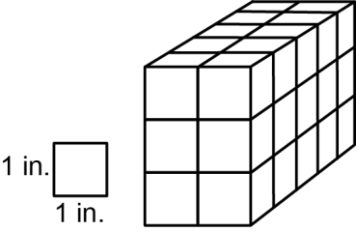

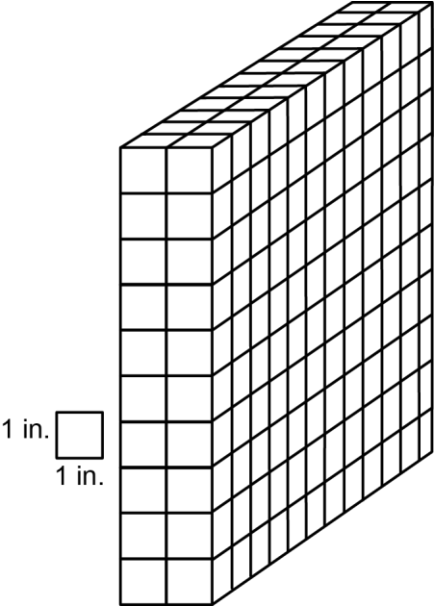

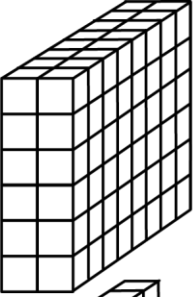
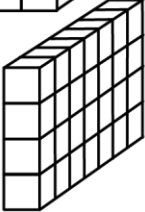
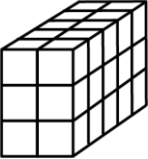
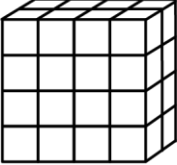
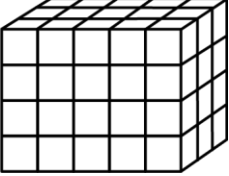


Content Standard	<p><b>MAFS.5.MD</b> <i>Measurement and Data</i></p> <p><b>MAFS.5.MD.3</b> <i>Geometric measurement: understand concepts of volume and relate volume to multiplication and division.</i></p> <p><b>MAFS.5.MD.3.3</b> Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p> <p><b>MAFS.5.MD.3.3a</b> A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.</p> <p><b>MAFS.5.MD.3.3b</b> A solid figure which can be packed without gaps or overlaps using <math>n</math> unit cubes is said to have a volume of <math>n</math> cubic units.</p> <p>Also Assessed:</p> <p><b>MAFS.5.MD.3.4</b> Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.</p>
Assessment Limits	<p>Right rectangular prisms with whole-number side lengths.          Graphics include unit cube.          Labels can include cubic units (i.e. cubic centimeters, cubic feet, etc.) or exponential units (i.e., <math>\text{cm}^3</math>, <math>\text{ft}^3</math>, etc.).</p>
Calculator	No
Acceptable Response Mechanisms	<p>Equation Response          Matching Item Response          Multiple Choice Response          Multi-Select Response</p>
Context	Allowable
Example	
Context	A rectangular prism(s) with unit cubes is shown.
Context easier	<p>Decrease dimensional values (<math>\leq 6</math>).          One prism given.</p>
Context more difficult	<p>Increase dimensional values (<math>&gt; 6</math>).          Increase number of prisms given (3 or more).</p>

Sample Item Stem	Response Mechanism	Notes, Comments
<p>Ellen is shopping for boxes. Which attribute should she use to determine the amount the box will hold?</p> <p>A. Area            B. Perimeter            C. Length            D. Volume</p>	<p>Multiple Choice Response</p>	
<p>For which solid object can the volume be found just by counting the number of cubes?</p> <p><b>A.</b> </p> <p><b>B.</b> </p> <p><b>C.</b> </p> <p><b>D.</b> </p>	<p>Multiple Choice Response</p>	

<p>A rectangular prism is shown.</p>  <p>1 in.  1 in.</p> <p>What is the volume of the prism in cubic inches?</p>	<p>Equation Response</p>	
<p>A rectangular prism is shown.</p>  <p>1 in.  1 in.</p> <p>What is the volume of the prism in cubic centimeters?</p>	<p>Equation Response</p>	

<p>Several rectangular prisms are shown.</p> <p><input type="radio"/> </p> <p><input type="radio"/> </p> <p><input type="radio"/> </p> <p><input type="radio"/> </p> <p><input type="radio"/> </p> <p>Which prisms have a volume between 20 and 40 cubic units?</p>	<p>Multi-Select Response</p>	
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