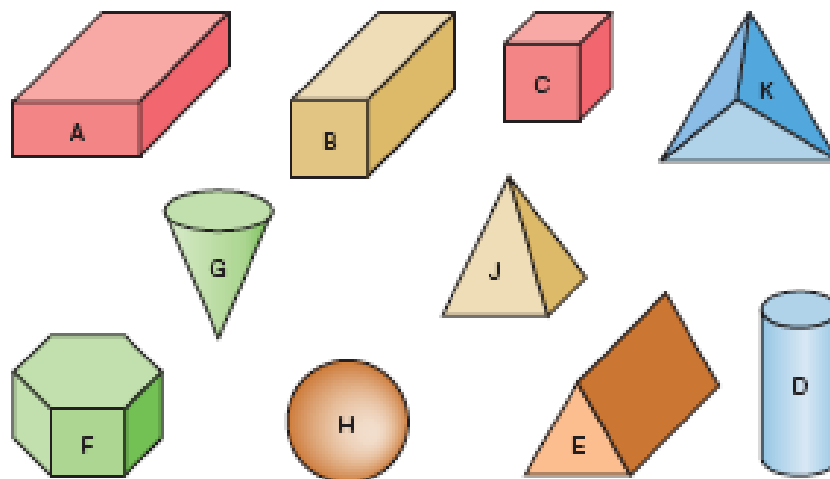




<p>Term:</p> <p style="text-align: center;"><b>Volume</b></p>	<p>Visual Representation:</p>
<p>Definition:</p> <p>The amount of 3-dimensional space an object occupies.</p>	<p>Association:</p>

**Investigate****Relating the Volumes of a Prism and a Cylinder**

Which of these pictures represent prisms? Justify your answers.  
What would you need to know to determine the volume of each prism?



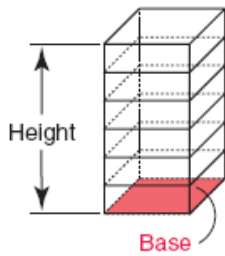


<p>Term:</p> <p style="text-align: center;"><b>Prism</b></p>	<p>Visual Representation:</p>
<p>Definition:</p> <p>A solid object with two identical ends and flat sides:</p> <ul style="list-style-type: none"><li>• The sides are parallelograms (4-sided shape with opposite sides parallel)</li></ul>	<p>Association:</p>

<p>Term:</p> <h1>Cylinder</h1>	<p>Visual Representation:</p>
<p>Definition:</p> <p>A solid object with:</p> <ul style="list-style-type: none"><li>• two identical flat ends that are circular or elliptical</li><li>• and one curved side.</li></ul>	<p>Association:</p>

## Volume of a Prism

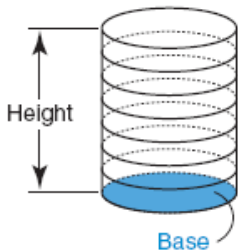
Volume<sub>rectangular prism</sub> =



Volume<sub>triangular prism</sub> =



Volume<sub>cylinder</sub> = Area of the base x height  
=  $\pi r^2 h$

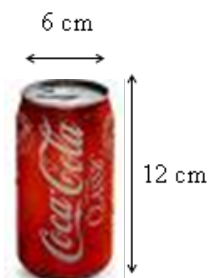


Ex. 1 Determine the volume of each prism or cylinder

a. A cereal box



b. A can of coke.



If  $1000\text{cm}^3 = 1000\text{mL}$ , how many mL of pop are in 1 can?