

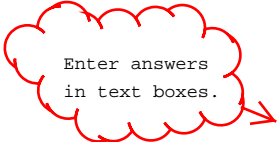
Name \_\_\_\_\_



Date \_\_\_\_\_

## Volume

Complete.

<p>1. How much cement is needed to build a sidewalk that is seven hundred sixty-four feet long, four feet wide and five inches thick? Round your answer to the nearest cubic foot.</p>	<p>2. Captain Howard had his crew paint the smokestack on his ship the Sea Snail. The smokestack is shaped like a cylinder and is 35 feet 9 inches tall. The radius of the smokestack's base is five feet. What is the surface area of the smokestack?</p>
<p>3. If you have five 5-in by 5-in x 5-in aluminum cubes and superglue them together in a row, what is the surface area of the resulting shape made by the five cubes?</p> 	<p>4. An underground chamber has been discovered in an old mansion. The chamber is thought to have been used for storing ammunition. The dimensions of the chamber are 14 feet by 5 feet by 5 feet. An old ammunition crate was also found in the chamber and it had dimensions of 1 foot by 1 foot by 4 feet. What is the maximum number of ammunition boxes of that size that could be put in the underground chamber?</p>
<p>5. If a cube with a 6-in side length is sliced in half what is the surface area of the two pieces?</p>	<p>6. Mr. Bloop has a cylindrical water tank on his farm. It is ten feet long and 2 feet 1 inch in diameter. Water flows out a valve in the bottom of the tank at a rate of 2.9 cubic feet per minute. At that rate, how long will it take to empty the tank when the tank is full?</p>