**Unit 7 #2 Volume & Surface Area**

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|  | **Volume** | **Surface Area** | **Picture** |
| **Rectangular Prism** |  |  | http://images.tutorvista.com/cms/images/67/rectangular-prism.jpg |
| **Square Pyramid** |  |  | http://images.tutorvista.com/cms/images/38/square-pyramid.png |
| **Cone** |  |  | h  r |
| **Cylinder** |  |  |  |
| **Sphere** |  |  | r |

**Example 1:** Find the volume of a rectangular prism with length 3 inches, width 8 inches, and height 2 inches.

**Example 2:** Find the surface area of a prism with a right triangular a base of length 21 inches, width of 20 inches and a height of 10 inches.

**Example 3:** The Great Pyramid of Giza has a height of 139 meters and a base side of 756 meters. Find the volume.

**Example 4:** The surface area of a square pyramid is 224 square inches. The sides of the base are 8 inches; find the slant height.

**Example 5:** Your ice cream cone is 7 inches tall. The diameter of the opening of the cone is 2 inches. How much ice cream can the cone hold if you don’t fill it past the brim?

**Example 6:** The surface area of a cone is 300π. If the radius is 12 inches, find the slant height.

**Example 7:** The giant can of soup Ms. Santos brought for lunch has a volume of 504cm3 and a diameter of 12 cm. How tall is her can?

**Example 8:** A can of soup has a diameter of 4 inches and a height of 6 inches. Find the area of the label.

**Example 9:** Calculate the volume of helium needed to inflate a spherical latex balloon with a diameter of 18 inches.

**Example 10:** The circumference of a baseball is 84Π centimeters. Find the surface area of the ball.