

Surface Area and Volume Mixed Word Problems

Directions: Choose & write whether the problem is asking you to find **SURFACE AREA** or **VOLUME**. Then write the formula which you would use to solve the problem. Solve and label your answer with the correct units.

1. Elena is going to buy wrapping paper to wrap her mom's birthday gift. How much wrapping paper does she need if the box is in the shape of a cube with an edge length of 8 in.?
2. Nicholas has a pepper grinder in the shape of a cylinder. It has a radius of 9 cm and a height of 24 cm. How much pepper will fit in the shaker?
3. A model of an Egyptian pyramid has a length of 6 inches, a width of 6 inches, and a height of 8 inches. How much metal does it take to make the solid pyramid model?
4. Reynaldo builds a pool in his backyard. The pool measures 55 feet long, 28 feet wide, and 9 feet deep. How much water will fit in the pool?
5. How many square feet of cardboard does Jessica need to make a rectangular prism with length of 16 inches, width of 9 inches, and height of 4 inches?
6. A package shaped like a cube has an edge that is 28 cm long. How much space is available to pack inside the box?
7. A cylindrical fish tank is 1 foot tall. The radius of the fish tank is 5 inches. How much water does it take to fill the tank? (Be careful – look at the units you are given).
8. A sno-cone cup has a radius of 2 inches and a height of 6 inches. How much flavored shaved ice will fit in cone-shaped cup?
9. Kissie is going to wallpaper her bathroom. The room has a length of 15 feet, a width of 12 feet, and a height of 8 feet. How much wallpaper does she need to cover the walls?
10. Brittany is going to cover the label on a Pringle's can and decorate it for Easter. She only needs to cover the label. If the diameter is 10 cm and the height is 20 cm, what is the minimum amount of paper needed?
11. A piece of artwork is made of solid wood and is in the shape of a cylinder. On top of the cylinder, there is a cone shaped piece of solid wood. How much wood is used to create the entire solid piece of artwork if the diameters are 6 yards and the heights are 5 yards?