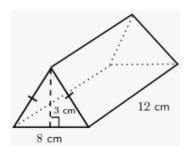
Name \_\_\_\_\_ Mr. Schlansky Date \_\_\_\_\_ Geometry



## Density

1. A brick that weighs 1824 grams has dimensions that measure 4 cm by 3 cm by 8 cm. To the nearest tenth, what is the density of the brick?

2. Clay in the shape of a triangular prism shown below has a mass of 1260 grams. What is its density?



3. A cylindrical candleholder has a diameter of 4.5 cm and a height of 20 cm. If the candleholder has a mass of 2900 g, rounded to the nearest whole number, what is its density?

4. A square pyramid with a base with an edge of 6 inches and a height of 12 inches has a mass of 684 grams. Find the density to the nearest tenth.

5. What is the density of a solid sphere of clay that has a diameter of 3.2 inches and has a mass of 552 grams? Round your answer to the nearest tenth.

6. A wooden cube has an edge length of 6 centimeters and a mass of 137.8 grams. Determine the density of the cube, to the *nearest thousandth*. State which type of wood the cube is made of, using the density table below.

Type of Wood	Density (g/cm <sup>3</sup> )
Pine	0.373
Hemlock	0.431
Elm	0.554
Birch	0.601
Ash	0.638
Maple	0.676
Oak	0.711