

Name: \_\_\_\_\_

Do Now:

### Bronze

Complete the table below. (answers to 1 dp where appropriate)

	Density (g/cm <sup>3</sup> )	Mass (g)	Volume (cm <sup>3</sup> )
Mercury	13.6	3000	
Iron		750	96.2
Lead	11.3		159.3
Gold	19.3	85	
Aluminium	2.7		55.6
Copper	8.9	275	
Marble		12350	4750
Teak		5000	7692
Concrete	2.3	15250	



Directions: Solve each problem below. Show your work and circle your answers.

**Example:** A student has a sample of aluminum that has a mass of 27 g and a volume of 10 cm<sup>3</sup>. What is the density of aluminum?

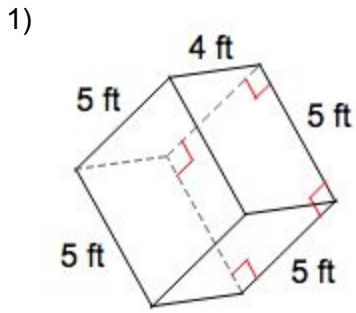
**Density = mass/volume**

**Density = 27 g / 10 cm<sup>3</sup>**

**Density = 2.7 g/cm<sup>3</sup>**

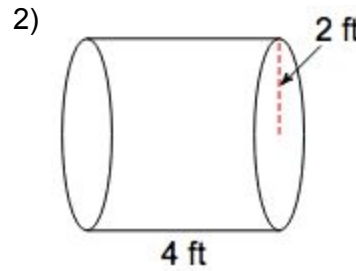
1. A loaf of bread has a mass of 500 g and volume of 2500 cm<sup>3</sup>. What is the density of the bread?
2. A block of wood has a mass of 6.0 g and a volume of 12.0 cm<sup>3</sup>. What is the density of the block of wood?
3. The density of a substance is 4.0 g/cm<sup>3</sup>. If a sample of the substance has a volume of 25 cm<sup>3</sup>, then what is its mass?
4. You have a lead ball with a mass of 420 g. The density of lead is 10.5 g/cm<sup>3</sup>. What is the volume of the ball?

**Silver:** Determine the volume of each solid. Use the given mass and the density table from the bronze section to determine what material each solid is made of.



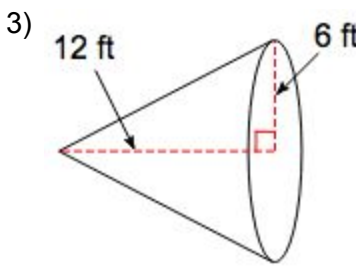
Mass: 890  
Solid:  
Volume:

Material:



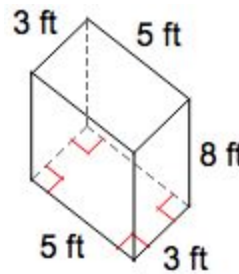
Mass: 130.702  
Solid:  
Volume:

Material:



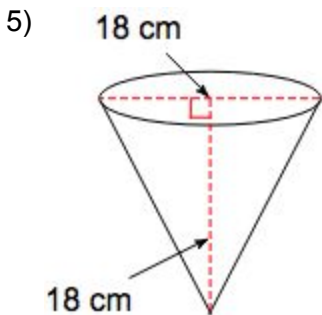
Mass: 5112.01  
Solid:  
Volume:

Material:



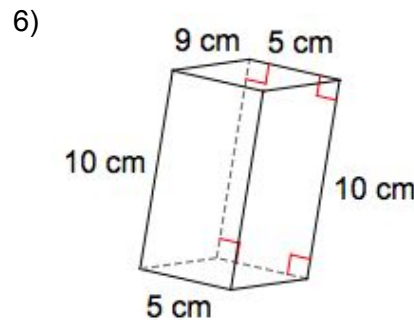
Mass: 1632  
Solid:  
Volume:

Material:



Mass: 992.47  
Solid:  
Volume:

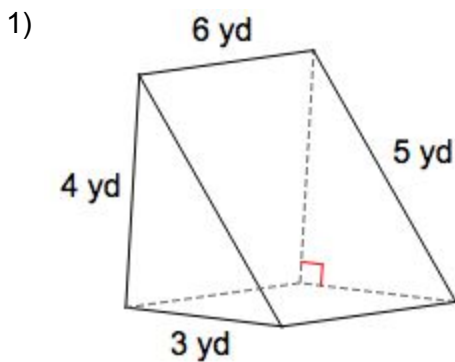
Material:



Mass: 8685  
Solid:  
Volume:

Material:

**Gold:** For each solid, identify the base shape and the volume. Use the volume and the given mass to determine the density.

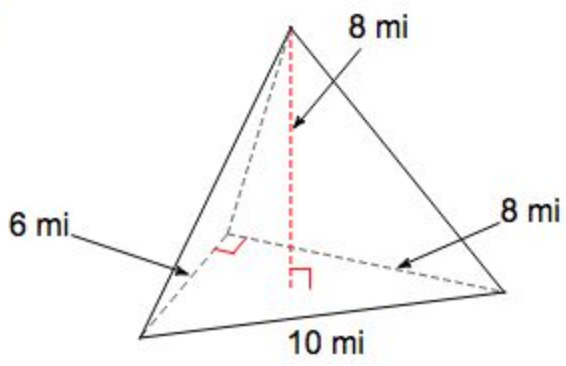


Mass: 0.0468  
Solid:  
Base Shape:  
Volume:

Material:

SUBSTANCE	DENSITY ( G/CM <sup>3</sup> )
AIR	0.0013
WOOD (OAK)	0.85
WATER	1.00
ICE	0.93
ALUMINUM	2.7
LEAD	11.3
GOLD	19.3
ETHANOL	0.94
METHANOL	0.79

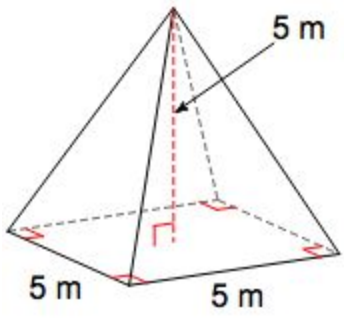
2)



Mass: 172.8  
 Solid:  
 Base Shape:  
 Volume:

Material:

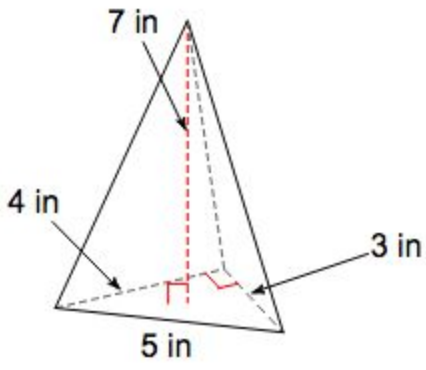
3)



Mass: 39.17  
 Solid:  
 Base Shape:  
 Volume:

Material:

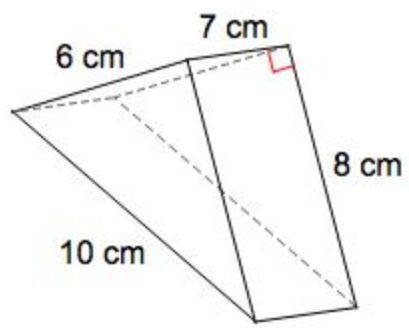
4)



Mass: 13.02  
 Solid:  
 Base Shape:  
 Volume:

Material:

5)



Mass: 132.72  
 Solid:  
 Base Shape:  
 Volume:

Material: