

## **Density of Metals**

- 1. What is density?
- 2. Define the formula for density:

Density of different Metals:

Brass: 8.4-8.73 g/cm<sup>3</sup>
Copper: 8.96 g/cm<sup>3</sup>
Aluminum: 2.7 g/cm<sup>3</sup>

• Steel (Iron): 7.75-8.05 g/cm<sup>3</sup>

• Lead: 11:34/g/cm<sup>3</sup>

Zinc: 7.13 g/cm³
 Silver: 10.49 g/cm³
 Gold: 19.3 g/cm³
 Bronze: 7.7-8.7 g/cm³
 Platinum: 21.4 g/cm³

Part 1: Density of a Cube (Method: Measurement)

Data/Observations	
Color	
Mass (g)	
Length of cube (cm)	
Width of cube (cm)	
Height of cube (cm)	
Volume of cube (cm³)	
Determine the density of cube (g/cm <sup>3</sup> )	
Actual density (g/cm³)	



## Part 2(a): Density of a Cylinder (Method: Measurement)

Data/Observations	
Color	
Mass of cylinder (g)	
Height of cylinder (cm)	
Diameter of cylinder (cm)	
Radius of cylinder (cm)	
Volume of cylinder (cm³)	
Determine the density of the cylinder (g/cm <sup>3</sup> )	
Identity of cylinder	
Actual density (g/cm³)	

## Part 2(b): Density of a Cylinder (Method: Water Displacement)

Data/Observations	
Color	
Mass (g)	
Initial volume in graduate cylinder (mL)	
Final volume in graduate cylinder (mL)	
Volume of metal cylinder (mL)	
Determine the density of the cylinder (g/cm³)	
Identity of cylinder	
Actual density (g/cm³)	