

Scavenger Hunt

$$A1) \frac{x \text{ m} | | \text{dm}}{0.1 \text{ m}} =$$

$$B1) \frac{x \text{ cm}^3 | | \text{mL}}{1 \text{ cm}^3} = x \text{ mL}$$

$$B2) x \text{ mm}^3 = ? \text{ cm}^3$$

$$V_{\text{coin}} = \pi r^2 t$$

~~$$\frac{x \text{ mm}^3 | | \text{cm}^3}{\text{mm}^3}$$~~

$$\frac{x \text{ ~~mm} \cdot \text{~~mm} \cdot \text{~~mm}~~ | | 0.001 \text{ m} | | 0.001 \text{ m} | | 0.001 \text{ m}}{1 \text{ ~~mm}~~ | | 1 \text{ ~~mm}~~ | | 1 \text{ ~~mm}~~}~~~~$$

$$= x \text{ m}^3 \text{ (very small!)}$$

$$\frac{y \text{ ~~m} \cdot \text{~~m} \cdot \text{~~m}~~ | | 1 \text{ cm} | | 1 \text{ cm} | | 1 \text{ cm}}{.01 \text{ ~~m}~~ | | .01 \text{ ~~m}~~ | | .01 \text{ ~~m}~~}~~~~$$

B4) $x \text{ cm}^3 = ? \text{ L}$

$x \text{ cm}^3$	1 mL	L
	1 cm^3	mL

D1) $D = \frac{m}{V}$

$x \text{ g/mL} = ? \text{ g/L}$

$x \text{ g}$	1 mL	
1 mL	$.001 \text{ L}$	

D2) $x \text{ g} = ? \text{ kg}$

$x \text{ g}$	1 kg	1 cm^3	kg/mL
1 cm^3	1000 g	1 mL	

D3) $x \text{ g} = ? \text{ kg}$

$x \text{ g}$	kg	mL	L
1 mL	g		

Scientific Measurement

$$4) \frac{\text{all pages}}{\# \text{ pages}}$$

$$\% \text{ error} = \frac{|\text{accepted} - \text{exp.}|}{\text{accepted}} \times 100\%$$

$$6) V = \pi r^2 h$$

$$7) D = \frac{m}{V}$$

$$8) \text{accepted} = 50.0 \text{ mL}$$

Density Blocks

2-3) theoretical mass

$$D = \frac{m}{V}$$

$$m = D \times V$$

↳ experimental

Particles of Chalk

2-3) use mole highway

5) $D = \frac{m}{V}$

$V = \frac{m}{D}$

↙ #1

↖ given

6) just like 1-3

Comp. Penny

2) $\frac{\text{Copper}}{\text{Penny}} \times 100\% = \% \text{Cu}$

$100\% - \% \text{Cu} = \% \text{Zn}$

3) % error of Zn, not Cu

4) $m = D \times V$