

11/15/17 Day ~~2~~ 7

$$\% \text{ Error} = \frac{|\text{Experimental} - \text{Theory}|}{\text{Theory}} \times 100$$

The diagram shows the formula above with arrows pointing from the terms to their definitions: "absolute value" points to the absolute value bars, and "Theory" points to the denominator.

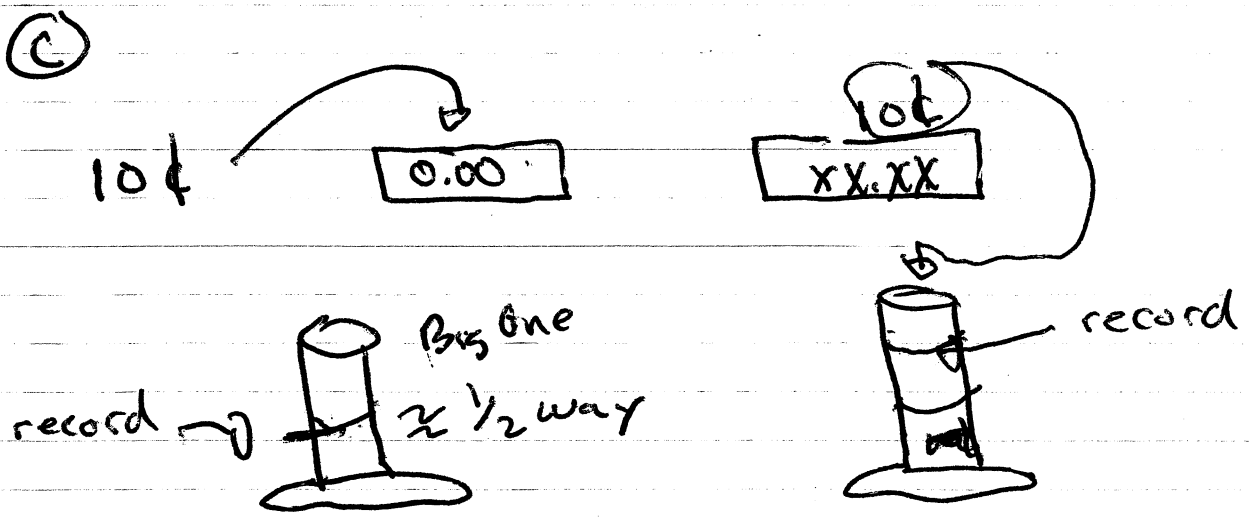
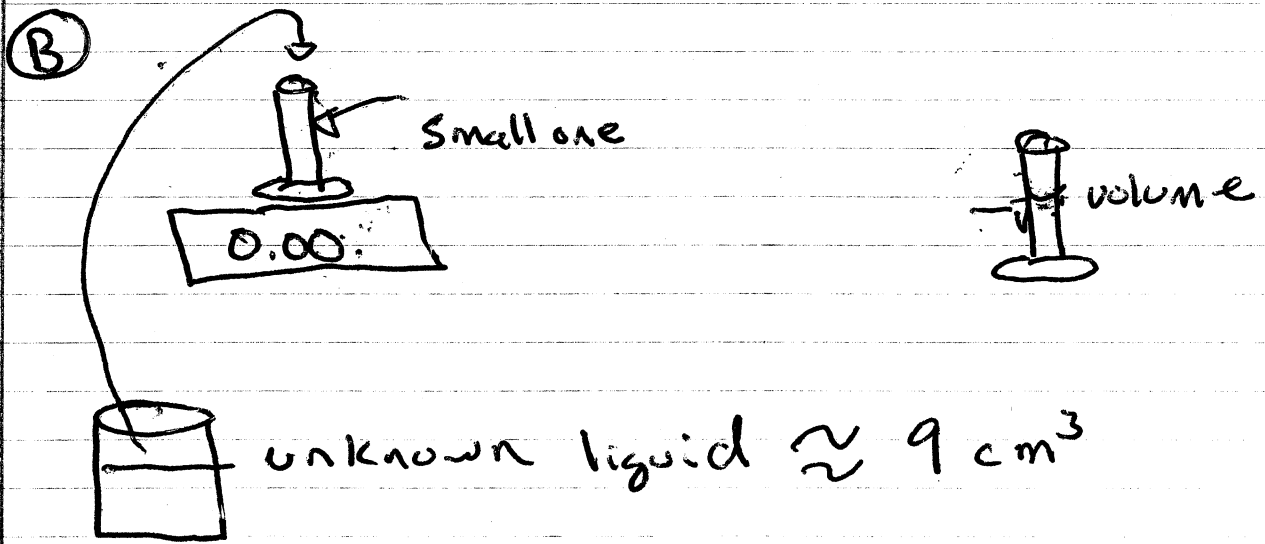
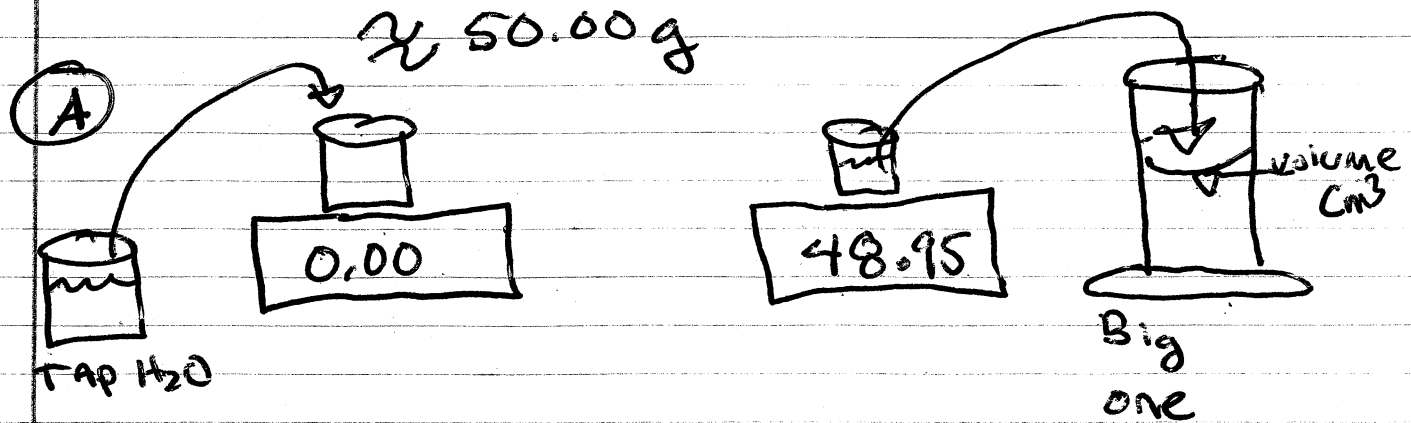
In the lab, you find the density to be $\frac{2.77 \text{ g}}{\text{cm}^3}$. In theory you should have gotten $\frac{3.00 \text{ g}}{\text{cm}^3}$.

Calculate the % error

$$\% \text{ error} = \frac{|2.77 \text{ g/cm}^3 - 3.00 \text{ g/cm}^3|}{3.00 \text{ g/cm}^3} \times 100$$

$$= \frac{0.23 \text{ g/cm}^3}{3.00 \text{ g/cm}^3} \times 100$$

$$= \boxed{7.7 \%}$$



subtract to find volume

Day 9

11 / 17 / 17
~~11 / 17 / 17~~

2

a

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

b

$$c \text{ \% error} = \frac{|E - T|}{T} \times 100$$

$$= \frac{|6.98 \frac{\text{g}}{\text{cm}^3} - 7.18 \frac{\text{g}}{\text{cm}^3}|}{7.18 \frac{\text{g}}{\text{cm}^3}} \times 100 = \boxed{2.8\%}$$

$$= \frac{0.20}{7.18} \times 100 = \boxed{2.8\%}$$