

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Course: \_\_\_\_\_ Professor: \_\_\_\_\_

## M4a - Density and Significant Figure Problems



Read the lab instructions and watch the videos before answering questions

1. If a non-perfect cube has the following dimensions:

$$\text{length} = 33.5 \text{ mm}$$

$$\text{width} = 33.0 \text{ mm}$$

$$\text{Height} = 34.0 \text{ mm}$$

- Convert the dimensions to cm and then calculate the volume in  $\text{cm}^3$

2. If the mass of the cube from previous question is:

$$\text{Mass} = 83.038 \text{ g}$$

Calculate the density of the cube and round it to the proper number of significant figures.

$$\text{Hint: Density} = \frac{M}{V}$$

