

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

## M6a Prelab: Measurements



**Read the lab instructions, the appropriate sections from your textbook and watch the videos before answering the questions.**

1. What is the volume of a cube with side  $a=23.5$  mm
  - a) in  $\text{mm}^3$ ?
  - b) in  $\text{cm}^3$ ?
  - c) in  $\text{m}^3$ ?
2. What is the volume of a cylinder of radius  $r$  and height  $h$ ?
3. Complete the assignments in Parts V-section A and V-section B of the lab description.
  - For the Graphical (Head-to-tail) Method of Vector Addition, your diagrams must be done in graphing paper. Vectors need to be correct, neat, and of appropriate scale. Angles must be shown and labeled.
  - For the Component Method of Vector Addition, your calculations should be neatly written in pages 13 and 15 of the lab handout, and summarized in tables V and VI respectively.

If you need help to complete this assignment, see your instructors during their office hours.

