2.3 Measurement and Precision | **Due Friday, August 29, 2025**

Perform measurements for problems 1-3. You <u>must</u> estimate between the lines for one extra decimal place to make a precise measurement.
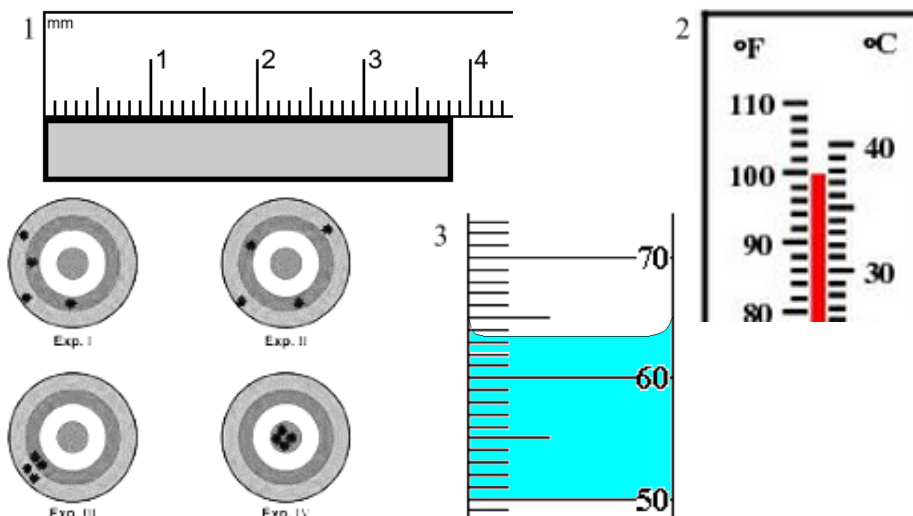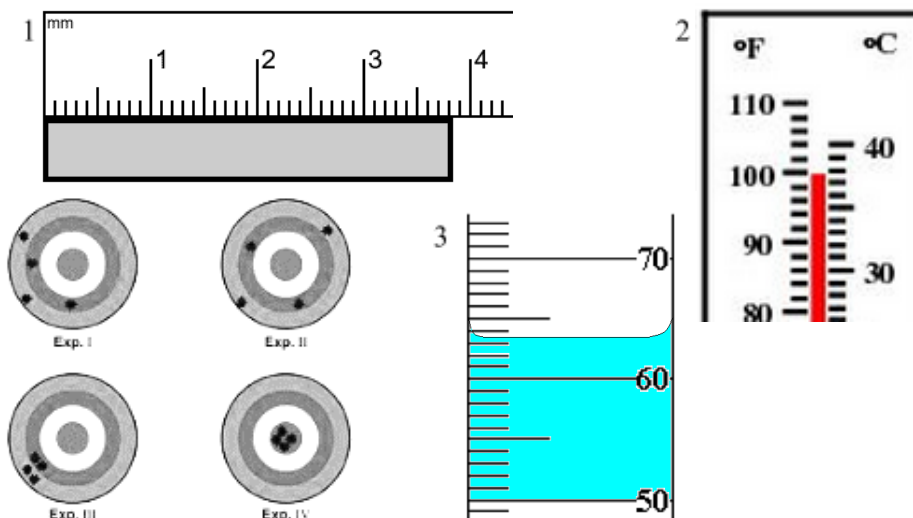
1. _____ mm

2. _____ °C

3. _____ mL

4. Which of the following diagrams to the right is:
   a) accurate and precise? _____
   b) precise but not accurate?_____
   c) neither precise nor accurate?

Exp. I   Exp. II
Exp. III   Exp. IV

5) A student at EHS performs an experiment to test the boiling point of water. She performs three trials and measures the following temperatures in each trial: 92.1°C, 92.0°C, and 92.0°C. The accepted value for the boiling point of water in Evergreen is 95.0°C.
   a) Are the student's measurements accurate? _____

   b) Are the student's measurements precise? _____

   c) What is a possible reason that the student's measurements were lower than the accepted value?