

Name_____ Date_____ Per_____

Percent Error Practice Problems

➤ Show all work, including a formula and correct units after EVERY number on EVERY problem, or you will not receive credit for that problem

- 1) A student estimated a mass to be 250g, but upon carefully measuring it, found the actual mass to be 240g. What is the percent error?
- 2) A student measured the temperature of boiling water and got an experimental reading of 97.5°C . What is the percent error?
- 3) An experimental measurement was taken of 10.4 mL and the actual measurement was 9.7 mL. What is the percent error?
- 4) The experimental calculation of the specific heat of aluminum was found to be $.156 \text{ cal/g}^{\circ}\text{C}$, but the actual value was given as $.185 \text{ cal/g}^{\circ}\text{C}$. What is the percent error?
- 5) Experimental = 62.5 g and accepted value = 65.2 g. Solve for percent error.

- 6) Joe measured the volume of an object 5 times, and got results of: 34.5 mL, 34.9mL, 34.2 mL, 33.4 mL, and 35.9mL. What is his average experimental result?
- 7) The actual volume of the object was 34.1 mL. What is the percent error of his average result?
- 8) A student estimated a mass to be 325g, but upon carefully measuring it, found the actual mass to be 342g. What is the percent error?
- 9) A student's calculation was found to have a 35.5% error, and his experimental measurement was 15.6 cm. What are the two possible values for the actual measurement?
- 10) A student's calculation was found to have a 15.6% error, and the actual value was determined to be 25.7 mL. What are the two possible values for the student's experimental measurement?