Percent Error — Student Practice

LAB REPORT & DATA QUALITY / PRACTICE

Name: _____ Date: _____

Show units and work. State assumptions and reporting precision. Leave enough space for each explanation.

1. **A recovered sample has measured mass 9.83 g and accepted reference mass 10.00 g. Find signed error, absolute error, and absolute percent error.**

2. **A reading is 10.4 g while accepted is 10.0 g. Find signed error and percent error.**

3. **An experimental value is 23.8 mL; reference 24.0 mL. Calculate signed and percent error.**

4. **Observed 0.098 mol/L versus a 0.100 mol/L accepted concentration. Calculate absolute percent error.**

5. **Explain why a positive percent error does not tell you whether the measurement is too high or too low.**

6. **A repeated measurement gives a small percent error but a wide spread of values. What can be said about accuracy and precision?**