

Name \_\_\_\_\_ Period \_\_\_\_\_

College Prep Chemistry of the Earth System

Assignment 0F – Accuracy and Precision in Lab

20 Points

Complete the following questions based on the in class discussion and presentation

Define <i>Accuracy</i> in Measurements	Define <i>Precision</i> in Measurements
Define <i>Known Values</i> in a laboratory measurement	Define <i>Estimated (Unknown) Values</i> in a laboratory measurement

For the following measurements determine which description of **accuracy** and **precision** best apply and give a brief explanation for your answer

**Answer Choices:** *Accuracy* – Accurate or Not Accurate, *Precision* – Precise or Not Precise

Measured Values (Experimental)	Correct Value (Known)	Accuracy (Accurate/Not Accurate)	Precision (Precise/Not Precise)	Explanation (Only a few words)
34.6g, 34.5g, 34.7g, 34.6g	34.6g			
31.5g, 36.2g, 34.7g, 33.2g	34.6g			
23.5g, 23.4g, 23.6g, 23.3g	34.6g			
12.3g, 100.4g, 150.3g, 1.5g	34.6g			

For the following measurements determine the known and unknown (estimated digits) alone with the unit and label

Measurement	Known Values	Estimated Value	Unit	Label	System of Measure*
394.50g NaCl					
0.0289m Table					
49.20°C Room					
1.384atm Balloon					

\*Previous Assignment Noteset