

Grade 11 Unit 1 Quiz

Quantitative Chemistry and Uncertainty

All values are fictional paper-model data. No chemical handling, device use, calibration, or real-world decision is requested. Total points: 18.

1. Distinguish accuracy from precision in a measurement claim. [3 pts]

2. A card lists 2.40, 2.43, and 2.46 arbitrary units. Calculate the mean. [3 pts]

3. Find the range of the values in Item 2 and state one feature the range does not establish. [3 pts]

4. Explain why units and a stated measurement condition are necessary in a quantitative comparison. [3 pts]

5. Identify one source of uncertainty or model boundary in a fictional measurement card. [3 pts]

6. Write a bounded CER using a supplied numerical result. Include evidence, reasoning, and an uncertainty; make no real-world recommendation. [3 pts]
