

Grade 12 Unit 8 Quiz

Advanced Synthesis Across Chemistry

All cards are fictional paper models. No chemical handling, device use, synthesis, fabrication, environmental intervention, or real-world recommendation is requested. Total points: 18.

1. State one reason a quantitative claim needs its unit, measurement condition, and uncertainty. [3 pts]

2. A fictional material card lists masses of 24.6 g and 25.0 g. Find the range and state what the range does not establish. [3 pts]

3. Explain how kinetic and thermodynamic models can make different but non-conflicting predictions in a paper scenario. [3 pts]

4. Identify one criterion for judging the quality of a fictional source or data card. [3 pts]

5. State one tradeoff that a responsible design-decision model must make visible before a conclusion is transferred. [3 pts]

6. Write a bounded CER that integrates two supplied fictional evidence types. Include a boundary and no product, synthesis, or intervention claim. [3 pts]
