

Grade 11 Unit 3 Quiz

Kinetics and Mechanistic Evidence

All values are fictional paper-model data. No reaction, chemical handling, catalyst use, device use, or optimization is requested. Total points: 18.

1. Define rate in the context of a paper-model change over time. [3 pts]

2. A card compares rates 1.2 and 1.8 arbitrary units per minute. Calculate the percent increase from the first to the second. [3 pts]

3. Explain why a rate trend alone does not prove a molecular mechanism. [3 pts]

4. Identify one comparison condition needed for a fair fictional rate-model comparison. [3 pts]

5. State one uncertainty or omitted variable that limits a mechanism claim. [3 pts]

6. Write a bounded CER about a kinetic card with evidence, reasoning, and a model limit; make no procedure or optimization claim. [3 pts]
