

Design a Comparison With Clear Variables



Use the matching sheet ID when checking answers.

Use the material to work through each task. Show the requested response.

1. What is intentionally changed?

Answer: the paper fold design

2. What result is measured?

Answer: the number of blocks held before falling

3. Name two conditions kept the same.

Look for:

- Names two stated controlled conditions.

One possible response: Paper size and gap width.

4. Why repeat each design instead of using one trial?

Look for:

- Connects repetition with variation.

One possible response: Results can vary; repeats reveal consistency.

5. Would using heavier blocks for only one fold keep the comparison fair?

Look for:

- Identifies the added variable.

One possible response: No. Block mass would change along with the fold.

6. What conclusion could the test support, and what would remain uncertain?

Look for:

- Limits the claim to tested conditions.

One possible response: It compares these folds under the tested conditions; other paper or gaps could give different results.

Open responses use criteria and an illustrative response. Other well-supported responses can be acceptable.