Claim · Evidence · Reasoning Graphic Organizer

Build a defensible response: answer the question, choose relevant evidence, then explain why the evidence supports the claim.

Name: _____ Date: _____

QUESTION / PROBLEM

CLAIM

EVIDENCE 1

data • observation • text detail

REASONING 1

why this evidence makes the claim stronger

EVIDENCE 2

data • observation • text detail

REASONING 2

why this evidence makes the claim stronger

FINAL REASONING / SCIENCE IDEA

Claim · Evidence · Reasoning — Guided

GUIDED VERSION

Name: _____ Date: _____

QUESTION / PHENOMENON

What are you explaining?

CLAIM

Give a concise answer.

EVIDENCE

Add the most relevant fact, data, or observation.

REASONING

Why does that evidence support the claim?

QUALITY CHECK

Is the evidence sufficient and relevant?

Claim · Evidence · Reasoning — Completed Example

Practice investigation · Evidence is data; reasoning explains why the data support the claim.

PRACTICE TEXT / CONTEXT

Two identical ice cubes were placed on separate plates. Plate A sat in direct sunlight; Plate B sat in shade. After 12 minutes, the cube on Plate A had lost 18 g of mass and the cube on Plate B had lost 7 g.

QUESTION / PHENOMENON

Does direct sunlight affect how quickly an ice cube melts?

CLAIM

The ice cube in direct sunlight melted faster than the ice cube in shade.

EVIDENCE

After 12 minutes, the sunlit cube lost 18 g while the shaded cube lost 7 g under otherwise identical conditions.

REASONING

Sunlight transfers radiant energy to the ice and its surroundings. More energy available for the phase change helps explain the greater mass loss from melting on Plate A.

QUALITY CHECK

The evidence compares the same time interval and identical cubes, but repeating the trial would make the conclusion more reliable.