

# SCIENTIFIC EXPLANATIONS

## CLAIM

Statement about the results of an investigation

- A one-sentence answer to the question you investigated.
- It answers, **what can you conclude?**
- It should not start with **yes** or **no**.
- It should describe the relationship between **dependent** and **independent** variables.

## EVIDENCE

Scientific data used to support the claim

Evidence must be:

- **Sufficient** — Use enough evidence to support the claim.
- **Appropriate** — Use data that support your claim. Leave out information that doesn't support the claim.
- **Qualitative** — (Using the senses), or **Quantitative** (numerical), or a combination of both.

## REASONING

Ties together the claim and the evidence

- Shows **how** or **why** the data count as evidence to support the claim.
- Provides the justification for why **this** evidence is important to **this** claim.
- Includes one or more **scientific principles** that are important to the claim and evidence.

**\*Remember:** Read what you've written to be sure it makes sense as a whole explanation.

Always write your CER from the  
perspective of the observer  
(no first person pronouns like "I" or "we").

# CER: Claim-Evidence-Reasoning

Question

Claim

Evidence

Evidence

Evidence

Reasoning