How to Write a Scientific Explanation

Components

- Make a claim about the problem.
- Provide evidence for the claim.
- Provide reasoning that links the evidence to the claim.

Definitions

- Claim: An assertion or conclusion that answers the original question
- Evidence: Scientific data that supports the student's claim that must be appropriate and sufficient. Can come from an investigation or other source such as observations, reading material, archived data, or other
- Reasoning: Justification that links the claim and evidence. Shows why the data counts as evidence to support the claim, using appropriate scientific principles.

Qualities of Communication

Write the explanation so others can understand it.

- Use precise and accurate scientific language.
- Write clearly so that anyone interested in the explanation can understand it.
- Articulate your logic.

Explanation Tool

Question	
Evidence from data and observations	Science ideas or concepts or principles
Claim (Your claim should answer the question.)	
Explanation (Make sure to link your claim, evidence, and science ideas.)	