CER (Claim-Evidence-Reasoning) – A Guide for Teachers and Students

Claim: This is a statement of the student's understanding of a phenomenon or results of an investigation. The easiest way to write a claim is to go back to the question and use it to structure the claim.

For example:
Question: Does the amount of light present affect the rate of plant growth?

Claim: The amount of light present affects the rate of plant growth.

Evidence: This is where the student includes specific evidence to support their claim.

For example:
The plants that were exposed to 1 hour of light each day grew an average of 2 cm during the observation period, while the plants that were exposed to 10 hours of light each day grew an average of 10 cm during the observation period.

Reasoning: This is where the student explains how or why the specific evidence supports their claim. It illustrates why particular evidence is the correct evidence to support the claim. The student should make connections to concepts studied in class to draw conclusions.

For example:
Photosynthesis depends on light energy, so the rate of photosynthesis is affected by a plant's exposure to light. To grow, a plant must photosynthesize to produce the necessary materials. The plants in this investigation that did not receive much light did not grow as much as the plants that received a normal amount of light.