



All You Can Test

An Intro to CER (Claim, Evidence, Reasoning)

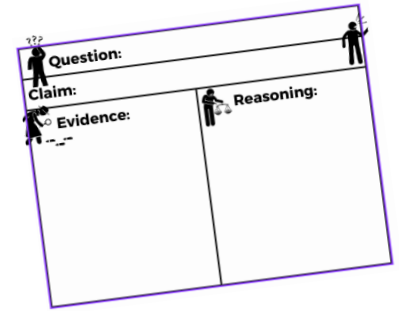
INTRODUCTION:

Scientists develop questions to test all the time! You can be just like them and develop a scientific question to test. Testing a question consists of three major components: claim, evidence, and reasoning.

Claim - the answer to a scientific question

Evidence - the data collected while testing a scientific question

Reasoning - the explanation for how the evidence proves the claim



CER charts, the image to the right, are usually how students document their claim, evidence, and reasoning when they test a question. Today, you will develop your very own question to test. You will then develop a procedure on how to test it, collect evidence from that procedure, and then use that evidence to construct your claim and reasoning. By the end of this activity, you will have an entire CER chart completed. Collaborate with your group, and be creative with your question! Use any of the supplies available to you to perform your test.

MATERIALS RECEIPT:

Proposed Teacher Materials:

- Yard sticks
- Rulers
- Markers
- Chart paper
- Scales
- String
- Timers
- Beakers

PROCEDURE:

1. Develop a question with your group that can be tested with whatever your teacher provides. Write the question in your CER chart.
2. Create a procedure/materials list to test the question. Write the procedure under “Evidence” in your CER chart.
3. Run the procedure (experiment) to test the question.
4. Collect data as you test the question. Construct the data table, chart, or graph under “Evidence” in your CER chart.
5. Use the evidence collected during your test to write your claim & reasoning in the CER chart.



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Question:

Claim:



Evidence:



Reasoning: