Use the CER poster at the end of this document to help you!!

Activity 4.2 – Do plants need food?

What will we do?

We will evaluate the evidence-based explanation for the claim that plants need food.

Prediction:

Do you think plants need food? Explain.

?

Procedure *Using the CER Poster to help you,*

- ☐ Read the following evidence-based explanations that support the claim, plants need food.
- ☐ ~~With the class~~ identify the claim, evidence and reasoning in each statement.
- ☐ Use the CER rubric to evaluate whether each explanation is convincing and why.

KEY

- Claim
- Evidence
- Reasoning

Explanations Using the key on the right, highlight the claim, evidence, and reasoning in each explanation below.

1. Plants need food. I know this because plants are beautiful.
2. Plants need food. I know this because I see that the plant in our classroom has grown since the beginning of the year. It used to be just a few inches tall and now it is almost a foot tall. Growth counts as evidence that plants need food, because the scientific principle tells us that living things need food to grow.
3. Plants need food. I know this because plants grow. Growth counts as evidence that plants need food, because the scientific principle tells us that living things need food to grow.
4. Plants need food. I know this because I see the plant in our classroom has grown since the beginning of the year. It used to be just a few inches tall and now it is almost a foot tall. This makes sense because growth means it is eating something.
5. Plants do not need food. They do not take anything in or eat. If they needed food, they would have to have a way to eat it and they do not have a mouth.

Analysis and Interpretation

1. Which evidence-based explanation was the most convincing?

2. Why did you choose that one?

NEXT PAGE...

According to what you've learned so far,

3. What do plants need to live and grow?

4. Where do plants get the energy and building blocks they need? (What do you think?)

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.*