Frankenstein Lab

Class

copy

What characteristics do living things share?

Goals:

* Determine the characteristics necessary for life based on observation.
* Identify the challenge of determining whether something is alive or not.

**Please answer the following question using complete sentences in your lab notebook.**

1. Think about the characteristics of living things. List two characteristics that you think define life. Ex. “living things breath” (can’t use that one ☺)
2. Draw the following data table below in your lab notebook.

**Your table should look like this:**

**Data Table: Observations of Specimen in Petri Dishes 1 and 2**

|  |  |  |
| --- | --- | --- |
|  | Petri Dish 1 | Petri Dish 2 |
| **Claim** | **Evidence to support claim** | **Evidence to support claim** |
| This specimen is **alive** |  |  |
| This specimen is **not alive** |  |  |

**Observe the specimen in Petri dish 1 on the overhead.**

1. Use your observations to list 2 pieces of evidence that supports both claims for Petri Dish 1.

**Observe the specimens in Petri dish 2 on the overhead.**

1. Use your observations to list 2 pieces of evidence that supports both claims for Petri Dish 2.

**Argumentation:** After the class discussion, answer the following questions, using evidence from your table. For each question, you should:

* Answer in complete sentence,
* State which claim is correct,
* Site specific evidence
* Explain why the evidence supports your claim

1. Is the specimen in petri dish 1 alive?
2. Is the specimen in petri dish 2 alive?

**Follow Up Questions: Answer in complete sentences in your lab book**

1. After actual specimen is identified, look back at your answer to #1. Are these characteristics enough to define life?
2. What characteristics distinguished the experimental materials as living or nonliving?
3. Predict what observations you would see if you were to observe the same Petri dishes a day after the demonstration. How would it be different from the first day? Why do you think this?
4. If we could travel to other solar systems, why would it be difficult to define life based solely on observation? Explain.