Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_

**Characteristics of Life Investigation: What does it mean to be alive?**

**SCENARIO:**

**DIRECTIONS**: At each station, observe the specimen provided. Complete the chart for each specimen using the key below.

* **STEP 1:** Select up to 6 characteristics common to all living things proposed by your class, and record them in the table below. Use the columns labeled “Characteristics.”
* **STEP 2:** Observe the samples at the stations provided by your teacher. Try to figure out if they have each of the characteristics you picked. Also indicate if you believe they are living or not. Use the following symbols to complete the data table:

**O: You have OBSERVED the specimen and seen that it has the characteristic**

**T: You THINK the specimen has the characteristic, but did not observe it**

**X: The specimen DOES NOT have the characteristic**

**DATA:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Station #** | **Specimen** | **Characteristics (O for observed, T for think, X for not present)** | **Is it alive now?** | **Was it ever alive?** | **Could it ever come to life or be alive?** |  **Based on your observations, would you classify the specimen as Living or Non-living?** |
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**ANALYSIS & RESULTS**:

**Part I**: Use the space below to construct a simple bar graph showing how many of the samples you investigated were living and non-living, according to you.



**Part II:** Answer the following questions on a separate sheet of paper with complete sentences. (Don’t forget to put your name on it!)

1. A hypothesis is a possible answer to a question that might be right or wrong. Before investigating the samples, what characteristics did you hypothesize were common to all living things?

2. Which characteristics that you investigated might be common to all living things, according to your data, and how do you know?

3. Which characteristics that you investigated are not common to all living things, according to your data, and how do you know?

4. Now, after analyzing your data, what is your new hypothesis about what characteristics are common to all living things?

5. After investigating the samples, are there any characteristics you did NOT originally think about that you now think might be common to all living things? What are they?

6. What does it mean to be alive?