

Name: \_\_\_\_\_

Pd: \_\_\_\_\_

Date: \_\_\_\_\_



# Living or Non....That is the Question

## Objective:

In this activity you will observe and compare unknown specimens in order to compile a list of what characteristics you believe living things have to have. The list will allow you to compare these specimens and then help you to determine whether each is living, non-living, or dead. Finally, you should also be able to use your data to decide which characteristics **ALL living things must have.**

## What to do as you observe the unknown specimens...

1. **Make observations:** Really observe each unknown specimen. Remember, observations mean using all your senses (*when appropriate*). Do not let your preconceived idea of what the unknown specimen might be, but really observe it! Take a moment to write a brief description of the item above the unknown specimen's number.
2. **Follow Directions:** Some unknowns may have special instructions, be sure to follow those exactly.
3. **Mark an "X."** Now, using your list of characteristics, place an "X" in the corresponding column in the data table IF you think that unknown specimen has that characteristic. It doesn't matter if you are ultimately correct in your understanding of what you observed. As long as you can defend why you selected the characteristic you did, you fulfilled the purpose of the lab!
4. After you have made all of your observations, review the data you collected, and in the bottom row of the table, indicate whether you believe the unknown to be **Living (L), Nonliving (NL), or Dead, (D).**

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## Post-Lab Questions



**Directions:** Answer the following questions in complete sentences.

1. How did you determine the difference between a living specimen and a nonliving one?
2. Explain the difference between a nonliving specimen and one that you considered dead?
3. Analyze your observations. Based on your data, determine what traits nonliving things have in common with one another?
4. According to your data table, List the trait(s) most living things have in common. Infer why you believe this is the case.
5. Referring to your answers for #4, do you think that is an accurate list for what living things have in common? Why or why not?
6. What traits did you list as characteristics of living things, but were not easily observable?

7. For the following specimens, label them as living (L), nonliving (NL), or dead (D) and then give a short one-sentence explanation for why it belongs in this category. This is NOT meant to be a research project. Just answer what you THINK, based on what you have learned after completing this activity. And be ready to defend your answer. (Even if you are ultimately wrong, that's ok, but really think about which category it belongs.)

a. HIV virus

b. Brown grass

c. Fertilized chicken egg

d. Egg bought in a grocery store

e. Your skin on the back of your hand

f. Hair on a fruit fly's back

g. Boiling water