

Name _____

Date _____

Lab: Living or Not Living?

Background: All organisms share characteristics unique to living things. In this lab, you will describe the activities carried out by unknown samples. Based on your observations, you will determine if the object possesses the characteristics of life.

Problem: Is the object living or not living?

Materials: partner, sample items, microscope, hand lens, text book

Procedure:

1. Analyze each sample item, and determine if the object is living or not living.
2. Use the following key to fill in the data table.
 - Key: L = Living
 - N = Not living now or ever
 - O = Once living, but now deceased
3. Give a brief explanation of why you chose that category. You should be able to back up your answer using the characteristics of all living things.
4. With your lab partner, go over each sample and compare your results.
5. Based on your discussion, you may keep or change your original conclusion.

Sample	Hypothesis	L,N,O	Life Function	Conclusion
Water				
Rock				
Plant				
Wood				
Jar				
Wet Peas				
Dry Peas				
Candle				
Microscope				
Unknown				

Lab Format

Title: _____

Purpose: What are you investigating?

Hypothesis: See data table.

Materials: See attached. (You need to attach your laboratory sheet that you were given the day of the lab.)

Procedure: See attached. (You need to attach your laboratory sheet that you were given the day of the lab.)

Data: Make a data table that is exactly like the one in your lab packet—except this data table is going to be neatly done.

Discussion: After you have answered the questions in the actual lab packet, you need to write the answers to each question below in this section of the lab report. Each answer needs to be numbered and written in complete sentences.

1. How do scientists define life?
2. List and briefly describe the characteristics of all living things.
3. What are some problems scientists may face when trying to define life?
4. What evidence did you find for each sample that it was either living or not living?
5. Was this a controlled experiment or an observation? Explain your answer.
6. How could this lab be changed into an experiment?

Conclusion: Refer back to EACH hypothesis for EACH sample. Was your prediction correct? Why or why not? Support your conclusion with the characteristics and life functions that we went over. You can find the definitions for each characteristic and life function in your notes, in your textbook, and online.