

What is Life Activity

Introduction

We think we can recognize something as being alive or not. Surprisingly, there is no firm scientific definition of life. There is no single test that can prove the presence or absence of life. There is no single characteristic that applies to all living things. Furthermore, some slow-growing organisms or organisms that have gone dormant seem to be non-living unless they are observed for long periods of time or under the right conditions. However, we can begin to define what is living by looking at characteristics that almost all living creatures share.

Procedure:

Part One

- Examine the pair of pictures given to you by your teacher.
- I examined a pair of _____.
- You will immediately know which of the pair is living and which is non-living. However, you are to think about how you knew this. Think about how you made your decision about which was living and which was non-living.
- Obtain a second pair of objects by trading with another group.
- My second pair of objects was the pair of _____.
- Again, you will immediately know which item is living and which is not. But think about how and why you knew this. Below, make a list of characteristics that you associated with life (at least 3).
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Part Two

- Combine with another group
- Each group should share its list of characteristics from above.
- Below, compile a complete list of characteristics that can be used to identify life.
- Make sure your list shows the combined list from both groups. If a characteristic was on both groups lists, only write it one time.

CHARACTERISTICS USEFUL FOR IDENTIFYING LIFE

- _____
- _____
- _____
- _____
- _____
- _____
- _____

Part 3

- Now we are going to play “20 Questions”
- Take a card from the teacher that has the name of a living or non-living item
- My item is _____
- When it is your turn, the class will be able to ask you 10 questions to attempt to figure out if your “mystery object” is living or non-living.
- **THE GOAL IS NOT TO FIGURE OUT WHAT THE OBJECT IS, ONLY IF THE OBJECT IS ALIVE OR NOT.**
- When it is the other groups turn, you must ask them questions about their object. Again, the goal is to ask question that will help you in making this decision. You will ask each group 2 questions.
- Below record the questions that you will ask the other groups when it is your turn to guess.
- You may use the questions you develop more than once, particularly if they were helpful.
- You must develop a bank of at least five questions that you will pull from
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
- After the class is done playing the game, answer the following questions:
 - Which question that you asked was most helpful in determining whether the object was living or non-living?

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- Which question was least helpful in determining whether the object was living or non-living?
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Now was a class, let's brainstorm an official list of characteristics that can be used to identify life. This is similar to what you did in part 2. However, since then, you have thought more about what it means to be alive, and your list could be quite different.

CHARACTERISTICS USEFUL FOR IDENTIFYING LIFE

- _____
- _____
- _____
- _____
- _____
- _____