AN02542_**Background:** Certain traits characterize all living things. In this lab, you will identify some of these key traits by observing living and nonliving things.

**Procedure:**

1. With your partner, brainstorm a list of what traits and/or characteristics ALL living things have in common. Write these below. Try to come up with at least seven.
2. As a class we will compile this list.
3. In the first column of the table, list the 10 traits from the list we made in class that YOU and your lab partner think are the most important and/or accurate.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Specimen** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **Trait** |  |  |
| 1. |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. |  |  |  |  |  |  |  |  |  |  |  |  |
| 9. |  |  |  |  |  |  |  |  |  |  |  |  |
| 10. |  |  |  |  |  |  |  |  |  |  |  |  |

1. You will be given about 1 ½ minutes at each of the 12 lab stations (each containing one specimen)
2. Look for each of the ten traits which you wrote down in each specimen that you observe. Place a check mark next to each trait that the specimen possesses.
3. Return to your lab table and answer the lab questions in complete sentences.

**Analysis and Conclusions:**

1. Which specimens did you determine were living (as seen in lab)? Nonliving?

Living: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Nonliving: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What trait(s) would you say were the most important for determining if the specimen was living or nonliving?
2. How could you divide the nonliving specimens into two new groups?
3. Which nonliving specimens had some characteristics of living things? Explain.
4. Give an example of a living specimen (in this lab) in which you were **unable** to observe all of the characteristics of life? What methods or conditions might allow you to observe these characteristics?
5. Do you think it is difficult for scientists to come up with criteria to define life? Why or why not?
6. According to your textbook, what are the characteristics of life? How did the “official” list compare with yours? LOOK IT UP!
7. Would you change the list? How? Why? Why not?