

Dedicated to Reducing Pesticides

# Unit 1 Lesson 3: Leaves, Legs, or Neither

Focus Areas: Classifying Living Things; Science, Language Arts, Math Focus Skills: observing, describing, classifying, and recording data

### **Objectives**

- To determine what living things need to survive
- To recognize patterns of classification
- To distinguish between plants and animals while recognizing the shared characteristics of both

## **Essential Questions**

- How are plants and animals similar?
- How are plants and animals different?

### **Essential Understandings**

- Although widely different in appearance, both plants and animals need food, water, air, and the ability to adapt to their environment.
- Both plants and animals grow and produce others like themselves.
  - Green plants are capable of producing their own food.

### Background

Plants and animals exhibit a variety of sizes, colors, and adaptations to their environment. Furthermore, they satisfy their basic needs in different ways. However, all living things share certain characteristics that distinguish them from non-living things. These include: the need for food, water, air, and protection from the elements. In addition, all living things grow and produce more like themselves. Only green plants are capable of producing their own food! Therefore, all other living things depend on green plants to survive. Even meat-eating creatures depend upon other creatures that eat plants.





University of Connecticut College of Agriculture and Natural Resources Cooperative Extension System







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### Vocabulary



characteristic	something that a person or thing has which makes them part of a group
classify	to put things that are alike in a group
observe	to examine something very carefully
similar	having some things the same
Logistics	<b>Time:</b> 30 minutes <b>Group Size:</b> 2 to 30 <b>Space:</b> an area for seating and placing of hula hoops
Materials	live plants and seeds picture cards of plants and animals * photographs of participants' pets (optional)



photographs of participants' pets (optional) 8 index cards 3" x 5" markers 2 hula hoops of different colors 2 signs, one for ANIMAL and one for PLANT

\* single copy provided

#### Preparation

Gather the materials and prepare the space. Create a Venn diagram using the hula hoops.

### Activity

#### Introduction

- 1. Review Unit 1 Lesson 2 by singing the song, We Are Alive!
- 2. Distribute the cards and samples of living and non-living things to the participants.



# Activity

#### Introduction (continued)

- 3. Call attention to the hula hoops and tell the participants that they are going to place their picture or sample in one of the two circles (living/color 1 or non-living/color 2).
- 4. As the individuals place their card or sample, ask why they chose the category they did. Point out that they are **CLASSIFYING** objects based on the living/non-living **CHARACTERISTICS**. If an individual needs help, ask a leading question: Does it grow? Can it make more like itself? Does it need food?, etc.
- 5. Discuss and evaluate their choices.
- 6. Collect all the cards and samples from the "living" hula hoop for redistribution and put the non-living specimens aside.

#### Involvement

- Pose the question, "What do all living things **need** to live?" Write the responses on the board under the category "**NEED**." Repeat the procedure using the question, "What can all living things do?" List the responses under the category "**CAN DO**."
- 2. Create a mutually agreed upon list and write these on 3" x 5" cards.
- 3. Place these cards in the intersecting portion of the two hula hoops. Place "**ANIMAL**" and "**PLANT**" signs in the portions of the hoops that do not intersect.
- 4. Distribute the samples and pictures of living things and explain that although all of these have some things that make them alike (calling attention to the 3" x 5" cards in the intersection), they are **classified** or named as either a **PLANT** or an **ANIMAL**.
- 5. Put the words "**PLANT**" and "**ANIMAL**" on the board and ask the participants to identify the differences between the two groups. List the responses on the board.





## Activity

#### Involvement (continued)

- 6. Allow time for individuals to compare their sample/picture to the list in order to determine in which group their sample/picture should be included.
- 7. In small groups or as individuals, have the participants place their sample/picture in the correct area.
- 8. Discuss their choices, allowing individuals whose placement is in question to justify their choice, and reposition their card or sample if necessary.

# Follow Up

- 1. Have the participants create a graph to illustrate the number of plants and animals represented.
- 2. As a group, list new characteristics to regroup the animals (for example; two legs, four legs, more legs, and no legs). Regroup the animals according to the established criteria.

**Note:** This may expand to a small group activity for free time when children set their own criteria and sort the samples/pictures based on their choices. They may want to cut out pictures from magazines to add to the card file.

