

# Living, nonliving/dead

## 4<sup>th</sup> Grade

Kelly Krupa

### **Benchmarks:**

SLC 18: Students will describe the characteristics that determine if something is living (ability to grow and change, reacting to its environment, needing a food/energy source, taking in gases, reproducing, and having cells), dead or nonliving.

### **Objectives:**

To help students understand how to classify an object as living, nonliving, or once living (dead).

### **Materials:**

- Rocks
- Ladybugs/mealworms
- Toy cars
- Dead leaves
- Tin foil
- Markers

### **Initial Demonstration:**

Break the class up into groups of 3-4 students. Give each group a rock, ladybug or mealworm, toy car, dead leaf, tin foil, and a magic marker.

Have the students sort these things into groups and name each group. Have each table tell the class what their groups are and why they picked them. Write all groups on board and discuss a few major problems, namely each item can only be in one group, no more.

### **Target Observations:**

- The objects can be sorted into several different types of groups
- In some methods of grouping, objects can be in more than one group

### **Procedure:**

Choose living and nonliving to have everyone sort their groups in to. Make sure each group separates their objects correctly, and address any misconceptions (i.e. the leaf isn't living, but it was once; the car can move but it is not living).

What are the differences between these groups (living and nonliving)?

### **Target Observations:**

#### **Living:**

- Ability to grow and change
- Reacting to its environment
- Needing a food/energy source
- Taking in gases
- Reproducing
- Having cells

**Target Model:**

- Objects can be separated into living/nonliving categories.
- An object is living if it has some of the following characteristics:
  - Ability to grow and change
  - Reacting to its environment
  - Needing a food/energy source
  - Taking in gases
  - Reproducing
  - Having cells

**Procedure:**

Review each characteristic and ask for other examples of each group.  
Let the groups go outside for 10 minutes outside to collect 3 living and 3 non-living objects. Only 3 per group! If they see something they can't or shouldn't catch (like a squirrel or bird), have them remember it and draw it, or let them bring some paper out with them to draw it there. Objects should go in the group where you first saw them. The grass/leaf was alive before you picked it, so it goes in the living list. Enforce rules, time limit and object limit. Discuss the collections. Hand out the attached worksheet for the students to work on.

**Target Observations:**

- There are lots of nonliving things outside
- It is hard to find non-plant living objects

**Name:**

**Date:**

Living things

- 1.
- 2.
- 3.

Non-living things

- 1.
- 2.
- 3.

Write down what makes a living thing different from a non-living thing.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Fill in the space below with your collected objects, then save or throw items away. Mark the objects as either living or nonliving.