

3rd Grade 2nd Day
Science Literacy Connection 1

Living and Nonliving Things

Standard 2: Students will understand that organisms depend on living and nonliving things within their environment.

Objective 1: Classify living and nonliving things in an environment.

Objective 2: Describe the interactions between living and nonliving things in a small environment.

Lions and Tigers and Bears, Oh My!

Background: Students will use the literacy page from the TRB (Teacher Resource Book) to introduce living things. They will ask questions of the text on sticky notes as they read.

Materials:

Reading selection from 3rd grade TRB. It is below.

Sticky notes

Instructions

1. Model reading the text and “think aloud” when you have a question. Show the students show the sticky note could be placed next to the text.
2. Ask students to read and ask questions as they go.
3. When they are done, have an individual student go the to board and place their sticky and read it. As students come up, group their questions. Eventually a pattern will emerge and you can see where students had the most questions.
4. Discuss how the questions might be answered and assign students to find out for the next day from their parents, the Internet or other sources.

LIONS AND TIGERS AND BEARS, OH MY!

In the movie, “The Wizard of Oz,” Dorothy came upon many unusual and different things. Some things were living, and other things were nonliving. Sometimes it is easy to see if things are living or nonliving. A puppy moves, grows, and has parents. Puppies are living. A bicycle can move, but does not grow or have parents. The bicycle is nonliving. Is a tree living? It grows and reproduces but doesn’t move much. Plants are living things that do not move very much. Animals are living things that usually move around a lot. An organism is anything that is living.



Organisms



Nonliving Things

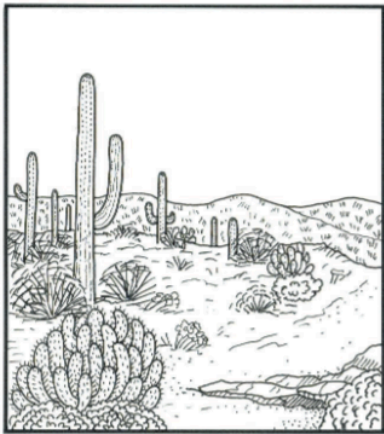
living - able to grow, reproduce, and move

nonliving - not able to grow, reproduce, or move

organism - anything that is living

Dorothy makes her way to Oz, a new environment. In the movie, Oz is different from Kansas where Dorothy came from. It has a different temperature, and has different amounts of sunshine and rain. The organisms that live there like the environment of Oz. On Earth, there are many environments. Some are dry and hot, like our deserts. Others are cool and moist, like our mountain forests.

Desert Environment



Forest Environment



In all environments there is an interaction between organisms and non-living things. Every breath of air you take is an interaction of a living organism (you) with a nonliving thing (the air). In all environments, there is an interaction between organisms. Plants need animals to carry away seeds. Animals need plants for shelter and food.

Let's learn how we can observe how organisms live in their environments.

Environments can be large or small. Large environments such as forests are difficult to study. Often small-scale environments are studied instead. A flowerbed in your yard is an example of a small-scale environment. An even smaller environment would be a terrarium.

Terrariums help us study land environments. Another type of small-scale environment is an aquarium. We can learn about ponds and oceans from an aquarium.



An Aquarium

aquarium - a container filled with water and water plants and animals

environment - the living and nonliving things in an area

interaction - things acting upon one another

observe - see or sense with careful study

small-scale - something small in size

temperature - how hot or cold something is

terrarium - a container with soil where land plants and animals are kept

Aquariums and terrariums are used to study environments. Interactions between living things can be observed. Experiments can be done to see what interactions are most important to living things. For example, do fish need warm or cool water? What is the best amount of bubbled air?

How much light do the plants need? If you have ever had a fish tank or ant farm, you know that they are also very fun just to watch!

The environment helps living things survive. Living things need shelter, food, air, the right temperature and moisture. If any of these are not correct for a plant or animal it may not survive in that environment. What can an organism do if the environment changes? Animals can move to a new environment but plants cannot. Plants must “move” by spreading their seeds.

Dorothy had a special way to leave the Land of Oz, one that none of us could ever use. She clicked her heels and commanded her shoes to take her back to her home environment. After all, there is no place like home.

moisture - water

survive - stay alive

Science Language that Students Should Know and Use

1. aquarium: a container filled with water and water plants and animals
2. environment: the living and non-living things in an area
3. interaction: things acting upon one another
4. living: able to grow, reproduce, and move
5. moisture: water
6. nonliving: not able to grow, reproduce, or move
7. observe: see or sense with careful study
8. organism: anything that is living
9. small-scale: something small in size
10. survive: stay alive
11. temperature: how hot or cold something is
12. terrarium: a container with soil where land plants and animals are kept