



NATURE CENTER AT SHAKER LAKES NATURE ALIVE – 2 hour program CMSD - KINDERGARTEN

Nature Center
AT SHAKER LAKES

Concepts –

- Living things are different from non-living things.
- Living things perform specific actions to indicate they are alive.
- Living things are made up of parts that allow them to do specific activities.
- Living things possess adaptations that help them to survive.
- All living things must be respected and treated properly.

Objectives

Students will:

- Develop criteria to decide if something is living or nonliving
- Classify things as living or nonliving, based on those criteria
- Understand that living things grow, reproduce, respond to stimuli, breathe and need energy
- Observe a variety of living things outside and identify adaptations that help those living things to survive
- Learn some adaptations plants and animals possess in order to survive Ohio's cold and snowy winters

Current Standards

- Science – Life Science: Living things are different from non-living things
- Science – Life Science: Living things have physical traits and behaviors, which influence their survival.
- Science – Physical Science: Objects and materials can be sorted and described by their properties.
- Science – Earth & Space Science: Weather changes are long-term and short-term

Vocabulary

Living - anything that is or has ever been alive

Non-living - anything that is not now nor has ever been alive

Alive – a plant or animal that breathes, needs energy, grows, responds to their environment, and reproduces.

Plant - living things that needs sunlight to make their own food, along with water, carbon dioxide and minerals.

Photosynthesis - the process by which a green plant uses sunlight to change water and carbon dioxide into food for itself

Animal - a living thing that can move from place to place, has a body covering, and eats other animals or plants for food

Survive – to continue living

Energy – the power or ability to make something work or be active.

Stimuli – something that causes a living thing to react

Environment - all the living and nonliving things that are around a living thing

Reproduce – when mature living things make new living things that are just like them - to have babies

Adaptation – a special body part or behavior that helps living things survive

Dormant – when a plant is resting and not growing during the winter months, but is still alive

Hibernate – when an animal is resting and not growing during the winter months, but is still alive

Procedure at the Nature Center

- 1) An instructor will meet you and your group at the main entrance of the Nature Center. The instructor will lead your class inside, where they will conduct an introduction of themselves and the Nature Center. The goals of the program, as well as the rules of the Nature Center, will be discussed at this time.
- 2) For the first activity, students will work in groups to sort various items in whatever way makes sense to them. The students will decide within their group as to how the items should be sorted (i.e., color, size, function, etc). Once this activity is completed, the instructor will discuss with the entire group how each individual group decided to sort the items.
- 3) Next, students will work in the same groups and sort the items again; however, this time they should sort the items by those that represent something that is alive and those that represent something that is not alive. We will then go over which items should be in the “alive” pile and which items should be in the “not alive” pile.
- 4) The instructor will discuss with the students how to identify things that are alive/living and prepare the students for the hike.
- 5) Each student will be given a scavenger hunt card, one side has pictures of things that are alive and the other side has pictures of things that are not alive. While on the hike, students will try to find as many of the objects on their card as possible. As we observe each object, we will test the criteria learned to determine whether or not that object is really alive.
- 6) Upon our return to the Nature Center, we will review what the group discovered on their hike and what makes something alive.
- 7) Your group will have 20 minutes for lunch in the Pavilion or one of the Nature Center classrooms.
- 8) Once the students are finished eating, the instructor will lead your group on a 30 minute seasonal fall hike. The instructor will discuss some of the important traits and behaviors plants and animals possess in order to prepare for the colder months ahead.
- 9) Along the hike, students will also collect leaves, which are to be identified and sorted, either at the conclusion of the hike (if time permits) or back at their school as a post activity.

Additional Suggested Resources:

- 1) Read books to the class about living things. Some suggested readings include:
 - “Hey, Little Ant” by Phillip and Hannah Hoose
 - “A Log’s Life” by Wendy Pfeffer
 - “Wonderful Worms” by Linda Glaser
- 2) Show your class the classic Alive, Not Alive song from Sesame Street, which goes over the qualities that something alive possesses. Here is a link to the video on You Tube:
<http://www.youtube.com/watch?v=BhIq4SoZFAQ>