



NATURE CENTER AT SHAKER LAKES
Earth is Our Home – 1 hour program
CMSD - Preschool

Nature Center
AT SHAKER LAKES

Concepts –

1. There is only one Earth where we can live.
2. Habitats are places where animals make their homes.
3. Landfills can destroy habitats.
4. People need to reduce their amount of garbage to lessen the need for landfills.
5. Recycling is an easy way to reduce what goes to the landfill.
6. There are 7 different kinds of plastics that may or may not be recyclable depending on where you live.

Objectives

Students will:

1. Children will explore the natural world using their five senses.
2. Children will be able to develop a concept on how they impact the planet with their waste.
3. Children will learn about the conflict between human and nature.
4. Children will learn that garbage goes beyond their homes and into landfills
5. Children will be able to reduce their personal waste by recycling and be able to identify items that can be recycled.

Current Standards

- Science Strand: Science Inquiry and Application, Topic: Inquiry
- Science Strand: Earth & Space Science, Topic: Explorations of our Natural World
- Science Strand: Life Science, Topic: Exploration of Living Things
- Language and Literacy: Cognitive Skills, Topic: Symbolic Thought
- Language and Literacy: Strand: Listening and Speaking, Topic: Receptive Language and Comprehension
- Language and Literacy: Strand: Listening and Speaking, Topic: Expressive Languages
- Language and Literacy: Strand: Listening and Speaking, Topic: Social Communication
- Language and Literacy: Strand: Reading, Topic: Reading Comprehension
- Mathematics: Strand: Number Sense, Topic: Number Sense and Counting
- Mathematics: Strand: Algebra, Topic: Group and Categorize
- Mathematics: Strand: Algebra, Topic: Patterning

Vocabulary

Habitat – the place where a living thing can find everything it needs to survive

Shelter – a place where animals rest their heads at night and are safe

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

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

Recycle- To process and reuse materials. Discarded newspapers are **recycled** to make new paper.

Landfill- an area of land that has been filled with garbage

Garbage- things that are no longer useful or wanted and that have been thrown out

Conserve- To keep and protect from harm, loss, or change.

Earth- The planet that we live on.

Planet- is a large body in outer space that orbits a star.

Extra/Additional Vocabulary:

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) Introduction to what a habitat is and how animals need them. Will also introduce the concept of garbage and landfills. Group Reading of “The Garbage Monster” by Jodi Sensel.
- 3) The recycling symbol will be introduced, ask the students what the symbol means and make sure they all know it means to *recycle*. The life cycle of a plastic water bottle when recycled. It is important to point out how recycling can take things that would normally go to a landfill and turns them into something new.
- 4) Present the recycling bin and tell the students they will be sorting plastic. Bring out the papers with the large numbers on them and count through the numbers after explaining there are 7 kinds of plastics. Hand each student their own plastic object. Have them look for the recycle symbol on their plastic object and for the number that is in the middle. Next have the students place their recyclable on or next to the corresponding number
- 5) After all the recycling has been sorted correctly, the instructor will discuss with the students the different ways the objects can be used as well as recycled. Students will learn the song “This Old Earth” and practice recycling while they sing.
- 6) The instructor will prepare the students for the hike and outdoor exploration. Using recycling and protecting the Earth as the themes for today, have the students go on a nature appreciation hike.
- 7) Upon our return to the Nature Center we will review with the students that in nature all things are connected. Review the terms they learned today and how they can help reduce landfills.

8) Additional Suggested Resources:

1) Read books to the class about student interactions with nature and the season they will be exploring in. Some suggested readings include:

- "Hey, Little Ant" by Phillip and Hannah Hoose
- "It's Winter" by Linda Glaser

Detailed list of Standards Covered

Sub-Domain: Science

Strand: Science Inquiry and Application

Topic: Inquiry

- Explore objects, materials and events in the environment.
- Make careful observations.
- Pose questions about the physical and natural environment.
- Engage in simple investigations.
- Describe, compare, sort, classify, and order.
- Identify patterns and relationships.
- Make predictions.
- Make inferences, generalizations and explanations based on evidence.
- Share findings, ideas and explanations through a variety of methods.

Strand: Earth and Space Science

Topic: Explorations of the Natural World

- With modeling and support, recognize familiar elements of the natural environment and understand that these may change over time.
- With modeling and support, develop understanding of the relationship between humans and nature; recognizing the difference between helpful and harmful actions towards the natural environment.

Strand: Life Science

Topic: Explorations of Living Things

- With modeling and support, identify physical characteristics and simple behaviors of living things.
- With modeling and support, identify and explore the relationship between living things and their environments.
- With modeling and support, demonstrate knowledge of body parts and bodily processes in humans and other animals.
- With modeling and support, demonstrate an understanding that living things change over time.

Strand: Cognitive Skills

Topic: Symbolic Thought

- Demonstrate understanding that symbols carry meaning and use symbols to represent thinking.

Domain: Language and Literacy Development

Strand: Listening and Speaking

Topic: Receptive Language and Comprehension

- Demonstrate understanding of increasingly complex concepts and longer sentences.
- Ask meaning of words.
- Follow two-step directions or requests.

Topic: Expressive Languages

- Use language to communicate in a variety of ways with others to share observations, ideas and experiences; problem-solve, reason, predict and see new information.
- Speak audibly and express thoughts, feelings and ideas clearly.
- With modeling and support use words acquired through conversations and shared reading experiences.
- With modeling and support determine the meanings of unknown words/concepts using the contexts of conversations, pictures that accompany text or concrete objects.
- Identify real-life connections between words and their use.

Topic: Social Communication

- With modeling and support follow typical patterns when communicating with others.

Strand: Reading

Topic: Reading Comprehension

- Ask and answer questions, and comment about characters and major events in the story.
- Actively engage in group reading with purpose and understanding.

Sub-Domain: Mathematics

Strand: Number Sense

Topic: Number Sense and Counting

- Demonstrate one-to-one correspondence when counting objects up to 10.

Strand: Algebra

Topic: Group and Categorize

- Sort and classify objects by one or more attributes.

Topic: Patterning

- Recognize, duplicate and extend simple patterns using attributes such as color, shape or size.