TEACHER GUIDE



Munch, Move, & Multiply: What it Means to be Alive (PreK-K)

DESCRIPTION

Students study living things through four stations: the science of observation (observing and drawing specimens), wiggly wildlife (look at living worms and learn how they grow), was this alive? (sorting living things from not living things), and how does it grow? (planting a bean seed and learning what it needs to grow). Students will also learn what makes something living in the introduction and break between stations with a living things movement activity.

OBJECTIVES

- Students define the word alive and discuss once alive vs never alive.
- Students are able to rotate from station 1 to station 2 (to 3, to 4) by recognizing the numbers on the station signs and going to the appropriate station when told.
- Students learn what makes something "living" and look for specific characteristics and traits of both preserved specimens in acrylic and living mealworms.
- Students participate in a small group conversation when determining if an object is once alive or never alive.
- Students sort objects into once alive/never alive categories and can answer how many are in each category.

OHIO'S LEARNING STANDARDS

Pre-Kindergarten

Science: Science Inquiry and Application

• Explores and investigates objects and events in the environment.

Language and Literacy: Language and Communication

Develops and expands understanding of vocabulary and concepts.

Mathematics: Number Sense

• Develops ability to recognize and name written numerals.

Kindergarten

Life Science: Physical and Behavioral Traits of Living Things

• Living things have specific characteristics and traits.

English Language Arts: Comprehension and Collaboration

• Participate in collaborative conversations about kindergarten topics and texts with diverse partners in small and larger groups. Follow agreed-upon rules for discussions (e.g.,



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listening to others and taking turns speaking about the topics and texts under discussion). Continue a conversation through multiple exchanges.

Mathematics: Measurement and Data

• Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. The number of objects in each category should be less than or equal to ten.

Before your Program & How to Set Up your Room

- Set-up requirements:
 - This program has 4 stations. Please be prepared to separate your class into 4 groups.
 - Please provide 2 tables and 2 floor spaces for the stations.
 - At least 1 adult is needed to assist with the stations.
- Please have student desks clear before the program begins or clear a space for students and museum educator to sit on the floor.
- Please provide an empty desk or small table for the museum educator to set up display items.
- If booking multiple programs in a row, transitions will be easier if museum staff sets up in only one location.
- Introduce the vocabulary and additional resources provided below.

VOCABULARY

Animal – an eating, breathing organism with a nervous system (insect, fish, snail, etc.).

Artificial – made by humans, may or may not resemble an actual living organism.

Cells – the smallest part of a living organism.

Dead – no longer living.

Energy – what living organisms get from food in order to perform daily functions.

Fake – something made to look like something else on purpose.

Fossil – preserved plant or animal from prehistoric time.

Living – organisms that grow, reproduce, use air, use energy, are composed of cells, and can change or react to the environment.

Man-made – objects made by people. Could be made of materials from once-living objects or never-living objects.

Natural – objects from nature.



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Non-living – lacking the characteristics of a living organism (either a dead organism or an object that was never alive).

Plant – living organisms that produce their own food.

Pretend – make believe, fake, false.

Real – actual, not fake, imaginary, or pretend. "Real" does not necessarily mean "alive."

Reproduce – to produce young or seeds to begin a new generation.

Seed – the living part of a plant that can start a new generation.

Space – the room that all living things need in order to live and get food.

EXTENSION ACTIVITIES

- 1. Read stories about plants and animals. Recognize stories that give plants and/or animals human characteristics (e.g., talking animals or dancing flowers).
- 2. Create a treasure hunt for plant and animal products in your school.
- 3. Examine your lunch (including containers) and decide what parts are once-living, or made from once-living organisms.

ONLINE RESOURCES FOR TEACHERS AND STUDENTS

Click the link below to find additional online resources for teachers and students. These websites are recommended by our Museum Educators and provide additional content information and some fun, interactive activities to share with your class.

CMNH Educators regularly review these links for quality. Web addresses often change so please notify us if any links have issues.

Cleveland Museum of Natural History http://www.cmnh.org

