

Life Cycles Program – 2nd – 4th grade

Teacher Resource Packet



Dear Teacher,

In this packet you will find suggested activities and resources related to the **Life Cycles** program that you can use in your classroom, before and after your visit to The Children's Museum of Science and Technology. Concepts taught in the classroom will come to life during your visit as students experience fascinating exhibits, museum artifacts and living specimens. We look forward to sharing in the excitement of scientific learning with you and your students. Please keep in mind the following when preparing for your Museum Program:

Please keep in mind the following in preparing for your Children's Museum of Science and Technology program:

- All students should wear nametags
- Please inform your museum educator of any special needs prior to the start of the program.

We hope you enjoy your Children's Museum of Science and Technology program. If you have any questions or comments, please call the Museum at 518-235-2120.

Life Cycles

Program Guide Description: Explore life cycles of reptiles, mammals, and insects. Meet a member of each species. Investigate differences and similarities in animal life cycles.

Grades: 2nd, 3rd, 4th

Program Time: 60 minutes

NYS Learning Standards Correlations:

Elementary Science / Living Environment 4.1: Describe the major stages in the life cycles of selected plants and animals

Elementary Science / Living Environment 1.2: Describe life processes common to all living things (a-grow, take in nutrients, breathe, reproduce, eliminate waste, die)

Program Goals:

- To introduce students to the concept that all animals have a lifecycle and that stages of a life cycle may differ between animals.
- To introduce students to the differences in the life cycles of a mammal, reptile, insect, and amphibian.

Participants Objectives:

- Participants will be better able to describe what a life cycle is.

Life Cycles Program – 2nd – 4th grade

Teacher Resource Packet

- Participants will be better able to describe the life cycle of mammals, reptiles, insects, and amphibians.

I. Pre / Post Activities

Macaroni Butterfly Life Cycle:

Materials:

Rice
Corkscrew Pasta
Small Shell Pasta
Farfalle Pasta
Glue
Cardboard
Markers

Students glue macaroni to cardboard to imitate the stages lifecycle of a butterfly. The rice is the egg, the corkscrew is the caterpillar, the shell is the chrysalis, the farfalle is the butterfly. Then, they can use markers to color in the background and the macaroni.

Writing Skills:

Pretend you are one of the organisms you learned about. Write your life story. Discuss your different life cycle stages in your story.

Or

Write a letter to an organization dedicated to the care and/preservation of animals. Ask for information about an animal, its life cycle and ways you can help.

For ex:

US Fish and Wildlife Service
50 Wolf Road
Albany, NY 12233

National Audubon Society
200 Trillium Lane
Albany, NY 12202

Turtle Homes
PO Box 297
Merrick, NY 11566

Life Cycles Program – 2nd – 4th grade

Teacher Resource Packet

Vocabulary:

Amphibian: An animal with a backbone that lives part of its life cycle in water and part on land.

Chrysalis: A pupa, especially of a moth or butterfly, enclosed in a firm case or cocoon.

Embryo: A developing animal before it is born or hatched.

Habitat: The area or environment where an organism or ecological community normally lives or occurs

Larva: A young animal that has a different shape than the adult.

Life Cycle: the cycle an animal goes through in its life including birth, growth, reproduction, and death

Mammal: An animal with a backbone and hair or fur; mothers produce milk for babies

Mimicry: an adaptation in which an animal looks like a harmful animal

Nymph: A stage in an insect's life cycle between egg and adult that looks like an adult, but has no wings.

Pupa: The stage in the insect life cycle between larva and adult.

Organism: an individual form of life such as a plant or an animal

Reptile: An animal that is cold blooded and has shelled eggs at birth

Life Cycles Program – 2nd – 4th grade

Teacher Resource Packet

III. Websites:

Santa Barbara Zoo. Animal Fact Sheets. <http://www.santabarbarazoo.org>

Oakland Zoo: Animals A to Z. <http://www.oaklandzoo.org/atoz/atoz.html>

The Life Cycles of Animals:

<http://www.biopoint.com/gvsu/projectlifecycles.html>

IV. Books

Crewe, Sabrina

Life Cycle of the Bee

Ganeri, Anita

Animal Life Cycles

Hare, Tony

Animal Life Cycles, Growing Up in the Wild

Kalman, Bobbie and

Langille, Jacqueline

What is a Lifecycle? (Science of Living Things)

Kalman, Bobbie and

Reiach, Margaret

The Life Cycle of a Butterfly

Royston, Angela

Life Cycle of a Frog