CHILDREN'S MUSEUM OF VIRGINIA PORTSMOUTH

Pre and Post – Visit Activities

Life Cycles in Nature

Table of Contents:

Important Information for Teachers

Thank you for choosing *Life Cycles in Nature* for your students! This program will cover the following aspects of your SOL's:

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) basic characteristics or properties of objects are identified by direct observation;
d) a set of objects is separated into two groups based on a single physical characteristic;
k) objects are described both pictorially and verbally.

K.6 The student will investigate and understand the differences between living organisms and nonliving objects. Key concepts include

b) Living organisms have certain characteristics that distinguish them from nonliving objects including growth, movement, response to the environment, having offspring, and the need for food, air, and water.

K.7 The student will investigate and understand basic needs and life processes of plants and animals. Key concepts include

a) Animals need adequate food, water, shelter, air, and space to survive;
b) Plants need nutrients, water, air, light, and a place to grow to survive;
c) Plants and animals change as they grow, have varied life cycles, and eventually die; and
d) Offspring of plants and animals are similar but not identical to their parents or to one another.

K.9 The student will investigate and understand that there are simple repeating patterns in his/her daily life. Key concepts include

b) the shapes and forms of many common natural objects including seeds, cones, and leaves; and
c) animal and plant growth.

Museum Manners

Please review with students and chaperones prior to your visit to the museum.

1. Please plan to arrive 15 minutes before your scheduled time to allow final counts and payment prior to your visit.
2. Remember to use walking feet.
3. Remember to use inside voices.
4. Teachers and chaperones must stay and explore with their students at all times throughout the museum.
5. Remember to share the exhibits and place items back where you found them.
6. Food and drink are not permitted in the museum.

Vocabulary

Organism- any living being that can breathe, move, grow, adapt to its environment, respond to stimuli, reproduce, metabolize, has an organized structure of cells, and requires energy.

Life Cycle- patterns of growth and behavior.

Essential/Life Needs- anything needed to maintain life (food, water, shelter, air and space for animals/nutrients, water, air, light, and space for plants).

Nutrients- substances needed for energy and growth.

Food- anything consumed to provide nutrition to an organism.

Water- an essential nutrient needed by all living organisms to survive.

Shelter- a structure that provides cover in which an organism can live.

Air- what organisms breathe to survive.

Space- an area an organism needs in which to move and grow.

Sunlight- solar energy needed for plants to grow.

Offspring- the descendant of a living organism.

Pre-Visit Activity

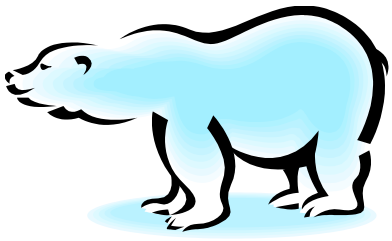
Try this before you visit the Children's Museum

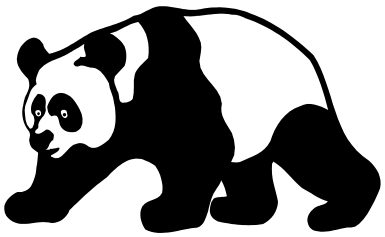
Matching

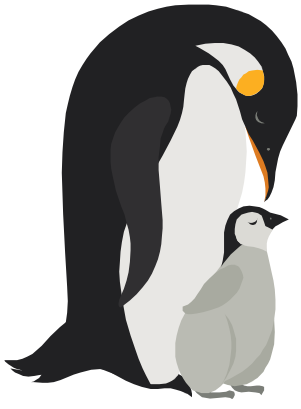
Objective: Students will be able to understand the differences in offspring from their parents. Meets SOL K.6b, K.7d

Materials: Pictures of adult and baby animals from magazines or books, index cards, scissors, glue (Teacher will cut out images of adult and baby animal forms and glue pictures to cards for students to match. *Example: adult chicken and chick, dog and puppy, cat and kitten*.)

Investigation: Explain that plants and animals change as they grow and sometimes they look like the "parent" and sometimes they do not. Students will work in groups to match the baby animal card to the appropriate adult animal card.







Post – Visit Activity

Try this as a review after you visit the Children's Museum

Beanbag Hopscotch

Objectives: Students will be able to identify the stages of an animal's life cycle and will understand the changes that occur from a baby to an adult organism. Meets SOL K.7a, b, c, d.
Materials: Pictures of animals showing different life stages, beanbags, tape or chalk to create a hopscotch set-up
Investigation: Draw the outline for hopscotch and place a life stage picture in each square. Each child takes a turn tossing the beanbag onto a square. The student then must name each life stage until he/she reaches the one on which the beanbag landed.