Dear Teacher,

In this packet you will find suggested activities and resources related to the All About Animals 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:

- All students should wear nametags
- All About Animals is 60 minutes in length, please arrive 10 minutes prior to start time.
- You will also be given additional time to explore the rest of the Museum and view a dome show.
- Please inform the museum upon confirmation of any special needs prior to the program at (518) 235-2120.

**All About Animals Program Description:** From feet to fins, learn all about animal body parts. Do animal yoga to see how animals move, see a live animal from a popular animal story, and create a unique animal.

**NYS Learning Standards:**

- **Elementary Science/Analysis, Inquiry, and Design S1.1:** Ask “why” questions in attempts to seek greater understanding concerning objects and events they have observed and heard about.
- **Elementary Science / Living Environment 3.1a:** Each animal has different structures that serve different functions in growth, survival, and reproduction.
- **Elementary Science / Living Environment 3.1c:** In order to survive in their environment, plants and animals must be adapted to that environment.
- **Elementary Arts Standard 1:** Creating, performing and participating in the arts.

**Program Goals:**

- To introduce students to the concept that animals have different body parts that have different functions.
- To introduce students to adaptations and the many different types there are.

**Participants Objectives:**

- Participants will be better able to describe animal body parts.
- Participants will be better able to compare and contrast how animal body parts help animals to survive.
I. Pre Visit Activities

A. Animal ABC Book

**Materials:**
- Colored paper
- Copy Paper
- Magazines
- Markers

Students will make an animal book with a different animal for every letter of the alphabet. Use colored construction paper for cover. Pages can be made of regular paper folded in half. Animals can be cut out from magazines, drawn, or collaged with colored paper.

B. Animal Relay Race:

**Materials:**
- Pictures of animals with their names on a piece of paper

Students and teacher can brainstorm different animals and make up different motions to go with each animal. The motions should describe how that animal moves or point out a particular body part. (For example, a bird could be flapping arms up and down to imitate wings and flight.) Then, they can have a relay race using the different animal motions. Have class break into teams. Place animal names into bags and have students choose one. Students run to a specific point and back doing the animal motion. If they do the correct motion their team gets a point. Repeat until all the students have participated.

II. Post Visit Activities

A. Do The Animal Dance:

**Materials:**
- Nonfiction books and photographs of animals, birds, insects, and fish
- Variety of recorded instrumental music

Introduce the book by reading a book that depicts a variety of animals, making sure to show children pictures of the different types of animals. Talk about the different animals and the many ways that they might move. Ask questions such as whether they move fast or slow and have the children mimic those movements.
Play some instrumental music and invite the children to move like some of the animals depicted in the book.

To take it a step further have the children work in groups to design a dance for a specific animal. Work with each group and assist them and encourage them to really think about how the animal moves. Then have each group demonstrate their dance for the class. See if the children can guess which animal they are portraying.

**B. Pick a Beak**

**Materials:**
- Bowl with water (for grapes)
- Salad dressing bottle (for raisins)
- Fondue fork
- Spoon
- Toothpicks
- Nutcracker
- Spatula
- Tweezers
- Raisins
- Grapes
- Apple squares
- Nuts (in shells)
- Crackers
- Sunflower seeds

Set foods, listed above, on a table. Put the “beaks” (fondue fork, spoon, etc.) at one end of the table. One at a time, have the children choose a “beak” and find a food for which it is adapted to eat. Are some “beaks” adapted to more than one food? What would happen if more than one bird was adapted for the same food?

**C. Animal Trackers**

**Materials:**
- Animal Tracks Book
- Animal Tracks Stamps
- Large sheets of paper
- Stamp pads
Students have learned some of the different types of animal movement there are. Now can they use their knowledge of those movements to “track” animals?

Introduce students to the different ways that we can tell that animals are present even when we can’t see them with our eyes. Once they come up with footprints or tracks, explain that tracks are what this activity is going to emphasize. Read *Whose Tracks are These? A Clue Book of Familiar Forest Animals* by James Nail.

After reading the story have the students create their own stories. Have them draw an outdoor scene without any animals or people. Explain that they should use the animal track stamps to write the story in place of the animals or people.

After the stories are finished have the students share their story/mystery. See if other students can determined what happened in each story.

**III. Vocabulary**

*Adaptation*: any body part, behavior, or physiological capability that increases an animal's ability to survive in its environment.

*Amphibian*: A cold-blooded, smooth-skinned vertebrate, such as a frog or salamander that is capable of living on land or in water.

*Environment*: the total surroundings and forces that act upon a living thing.

*Habitat*: the place where an animal lives.

*Mammal*: Any of various warm-blooded vertebrate animals, including humans, characterized by a covering of hair on the skin and, in the female, milk-producing mammary glands for nourishing the young.

*Predator*: is an animal that hunts and kills other animals for food

*Prey*: An animal hunted or caught for food

*Reptile*: Any of various cold-blooded, usually egg-laying vertebrates, such as a snake, lizard, crocodile, turtle, or dinosaur,
having a covering of scales or horny plates and breathing by means of lungs.

IV. Books for Children and the Classroom:

An introduction to various different beaks and their purpose.

A book of animal tracks presented as a clue book for children to learn to identify tracks. The different tracks are accompanied by clues about the animals such as habits and eating preferences to help children come to the proper conclusion as to whose tracks each are.

This story teaches readers how to track animals by identifying footprints and using various other clues.

Ganeri, Anita. *Usborne Book of Animal Facts*
Moreton, Daniel. *Snakes and Lizards*
Stuart, Gene. *Our Amazing Animal Friends*