

EXPLORING ANIMALS

60 Minute Animal Adaptation program Virtual Field Trip (VFT) Grades 1-4

DESCRIPTION

Animals are grouped based on how they are different from other animals, and these groups are called “classifications.” This program explores the adaptations of three groups of animals (birds, reptiles, and mammals) that allow them to interact successfully with their environment.

OBJECTIVES

- Observe mammals, birds, and reptiles and determine how they interact with their respective environment.
- Identify what differentiates mammals, birds, and reptiles from each other based on their characteristics and observe how these characteristics place each animal into a level of classification.
- Identify adaptations that mammals, birds, and reptiles have in relation to the five senses and how they help them survive.

OHIO’S LEARNING STANDARDS

Grade 1

1.LS.1 Living things have basic needs, which are met by obtaining materials from the physical environment.

1.LS.2 Living things survive only in environments that meet their needs.

RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.

Grade 2

2.LS.1 Living things cause changes on Earth.

2.LS.2 All organisms alive today result from their ancestors, some of which may be extinct. Not all kinds of organisms that lived in the past are represented by living organisms today.

RI.2.3 Describe the connection between a series of historical events, scientific ideas or

concepts, or steps in technical procedures in a text.

Grade 3

3.LS.3 Plants and animals have life cycles that are part of their adaptations for survival in their natural environment.

SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

Grade 4

4.LS.1 Changes in an organism's environment are sometimes beneficial to its survival and sometimes harmful.

RI.4.6 Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in perspective and the information provided.

SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.

How You Can Help Us Make This Virtual Field Trip A Success

- If your students are joining us from your classroom computer, please arrange your room and projection screen so everyone can see us clearly.
- Please test your visual and audio connections prior to the day of the program. If you would like us to facilitate a test connection with you, we are happy to do so.
- If you and your students are joining us from your homes, we will have an educator monitoring the Chat feature for questions. We request that you or another staff person serve as a Co-Host to help monitor students for any inappropriate Chat or camera behavior.
- If you will have a hybrid class (some at school, some joining from home), our educator will monitor the Chat and camera behavior, and we reserve the right to temporarily move any disruptive students to our Waiting Room so we or school staff can correct the undesired behavior.
- If you prefer, we can turn off all cameras and interact solely via the Chat feature.

VOCABULARY

Adaptation – a change or the process of change by which an organism or species becomes



better suited to its environment.

Organism – an individual animal, plant, or single-celled life form.

Habitat – a natural home or environment of an animal, plant, or other organism.

Ecosystem – a biological community of interacting organisms and their physical environment.

Biotic – relating to or resulting from living things, especially in their ecological relations.

Abiotic – physical rather than biological; not derived from living organisms.

Environment – the surroundings or conditions in which a person, animal, or plant lives or operates.

Vertebrate – an animal of a large group distinguished by the possession of a backbone or spinal column, including mammals, birds, reptiles, amphibians, and fish.

Mammal – a warm-blooded vertebrate animal of a class that is distinguished by the possession of hair or fur, the secretion of milk by females for the nourishment of the young, and (typically) the birth of live young.

Reptile – a vertebrate animal of a class that includes snakes, lizards, crocodiles, turtles, and tortoises. They are distinguished by having dry scaly skin and typically laying soft-shelled eggs on land.

Bird – a warm-blooded egg-laying vertebrate distinguished by the possession of feathers, wings, and a beak and (typically) by being able to fly.

Trait – a distinguishing quality or characteristic, typically one belonging to a person.

Endothermic - (of an animal) dependent on or capable of the internal generation of heat.

Exothermic – the process where an animal's body generates heat, often through metabolic processes, and releases it into the surrounding environment.

Amniotic egg – a terrestrially adapted egg, characterized by a shell and extra-embryonic membranes.

EXTENSION ACTIVITIES

1. How are the needs of birds being met by their environment? What are they taking from the ecosystem to help them survive?
2. How do birds interact with their habitat? Can it change the ecosystem around it- what if there are more birds? Could they eat too much food?
3. Choose an animal that you've seen in your backyard. What traits are you seeing (physical and behavioral) that will help this animal survive? What would happen if those traits were taken away? Would it be able to survive easily?





4. Choose an animal from the presentation today (from Perkins Wildlife Center). What biotic and abiotic things in the habitat help the animal to survive? What would happen if something changed in the environment?

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.

- NWF Wildlife Library: <http://www.nwf.org/Wildlife.aspx>
- ODNR A to Z Species Guide: <http://wildlife.ohiodnr.gov/species-and-habitats/species-guide-index>
- <https://www.cmnh.org/> to find out more information about our galleries and programs offered.

