



## Amazing Animal Adaptations

SKELETONS: Museum of Osteology

*Pre-Visit*

**3<sup>rd</sup> – 5<sup>th</sup> Grade**

**55 Minute Program**

### **3<sup>rd</sup> Grade:**

#### **Florida Next Generation Sunshine State Science Standards**

*SC.3.N.1.1* - Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

*SC.3.N.1.2* - Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.

*SC.3.N.1.3* - Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.

*SC.3.N.1.4* - Recognize the importance of communication among scientists.

*SC.3.N.1.5* - Recognize that scientists question, discuss, and check each other's evidence and explanations.

*SC.3.N.1.6* - Infer based on observation.

*SC.3.L.15.1* - Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.

*SC.3.L.17.1* - Describe how animals and plants respond to changing seasons.

### **4<sup>th</sup> Grade:**

#### **Florida Next Generation Sunshine State Science Standards**

*SC.4.N.1.1* - Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

*SC.4.N.1.2* - Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.



*SC.4.N.1.3* - Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.

*SC.4.N.1.4* - Attempt reasonable answers to scientific questions and cite evidence in support.

*SC.4.N.1.5* - Compare the methods and results of investigations done by other classmates.

*SC.4.N.1.7* - Recognize and explain that scientists base their explanations on evidence.

*SC.4.L.16.2* - Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.

*SC.4.L.16.3* - Recognize that animal behaviors may be shaped by heredity and learning.

#### 5<sup>th</sup> Grade:

#### **Florida Next Generation Sunshine State Science Standards**

*SC.5.N.1.1* - Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.

*SC.5.N.2.2* - Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.

*SC.5.L.14.1* -- Recognize body parts related to movement and the five senses.

*SC.5.L.14.2* -- Observe plants and animals and recognize how they are alike in the way they look.

*SC.5.L.15.1* - Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.

*SC.5.L.17.1* - Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.

#### **Program Overview**

*Amazing Animal Adaptations* will familiarize students with a number of types of adaptations through hands-on observation of various specimens. The participants will work in teams to



evaluate their specimens, determine what types of adaptations they exhibit, and then communicate their finds to the class.

### **Learning Objectives**

1. Participants will successfully define and explain how adaptations help animals survive.
2. Participants will successfully identify a variety of adaptations and explain their function.
3. Participants will successfully work in a team environment and communicate their observations to their team.
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### **Vocabulary**

- Adaptation: A feature or trait that enables an animal's survival
- Predator: An animal that hunts and eats other animals
- Mimicry: Close external resemblance of an animal or plant (or part of one) to another animal, plant, or inanimate object
- Herbivore: An animal the exclusively eats vegetation
- Prey: An animal the is hunted and eaten by other animals
- Food Chain: A hierarchical series of organisms each dependent on the next as a source of food
- Omnivore: An animal that eats both meat and vegetation
- Camouflage: An animal's natural coloring or form that enables it to blend in with its surroundings
- Carnivore: An animal that exclusively eats meat
- Defense: A means of protecting something from attack