

Grade Levels: 3 - 6

Time: 45 Minutes



BREVARD ZOO

# Classification Investigation

**Goal:** Provide an introduction to the animal kingdom using biofacts and hands-on animal interaction.

## Objectives:

- Students will discover the five major groups vertebrates – reptiles, amphibians, mammals, birds, and fish.
- Students will recognize which animals belong to each group, according to their characteristics.
- Students will understand observation is an important part of science.
- Students will recognize that scientists base their explanations on evidence.

## PLANNING YOUR RESERVATION

\*Fall and spring fill quickly  
**PLEASE REGISTER EARLY**

\*Groups must register  
**2 WEEKS IN ADVANCE**

\*Programs require a  
**MINIMUM OF 15 PEOPLE**

\*Programs are available  
**ON AND OFF-SITE**

\*Visit our website for  
**EDUCATIONAL RESOURCES**

\*Proper adult supervision  
**REQUIRED AT ALL TIMES**

Students will discover how scientists group or classify vertebrates based on their physical and behavioral characteristics. With this hands-on animal experience, they will be able to identify the five vertebrate classes: mammals, reptiles, amphibians, fish and birds.

## Curriculum Alignment:

SC.3.N.1.6; SC.3.N.1.7; SC.3.L.15.1; SC.4.L.16.3, SC.4.L.17.2, SC.4.L.17.4, SC.5.L.14.2, SC.5.L.15.1, SC.5.L.17.1, SC.7.L.15.2, SC.7.L.15.3, SC.7.L.17.1, SC.7.L.17.2, SC.7.L.17.3

## Where education and conservation collide!

This program, presented by Brevard Zoo Education staff, is an enhanced experience of the distinct and unique wildlife habitats found at Brevard Zoo. Students delve into the concept through fun, interactive activities, questions and participatory responses, hands-on animal encounters, and animal meet and greets. Programs are designed to supplement in-class learning. Depth and structure vary depending on grade and age range.

**Keywords:** Amphibian, Animal, Bird, Carnivore, Consumer, Class, Ectothermic, Endotherm, Exoskeleton, Fish, Herbivore, Invertebrate, Mammal, Metamorphosis, Reptile, Taxonomy, Vertebrate, Warm-blooded

## What are animals?

Millions of organisms belong to the Kingdom Animalia. There are five groups of vertebrates: Fish, Amphibians, Reptiles, Mammals, and Birds.

Each of these groups of animals possess backbones and are therefore known as vertebrates (chordates).

Fish are vertebrate animals that live underwater and breathe through gills. There are over 20,000 species of fish that can be divided into three major groups: cartilaginous fish, bony fish, and jawless fish.

Amphibians must remain moist as they process oxygen through their skin. Therefore, they live part of their life on land and part in water. Examples of amphibians include frogs, toads, salamanders, and newts. Amphibians are cold-blooded. This means that they are unable to regulate their body temperature metabolically.

Reptiles are also cold-blooded. Instead of having slimy moist skin, a reptile's body is covered with scales. The majority of reptiles lay eggs on land, rather than in the water like amphibians. Reptiles include crocodiles, alligators, snakes, lizards, turtles, and tuataras.

There are over 5,000 species of mammals. Mammals are covered in fur or hair. They are warm-blooded and able to regulate their body temperature. Mammals typically give live birth and the mother feeds the young milk. Examples include sugar gliders, chinchillas, guinea pigs, dogs, cats, and manatees.

The presence of feathers distinguishes birds from other animals. Worldwide, there are about 10,000 species of birds. Birds lay eggs and have a beak rather than teeth. Not all birds can fly.

Scientists use the unique characteristics of each animal to classify it using taxonomy.

Taxonomy is the theory, practice and rules for classification of living and extinct organisms. Animals are given scientific names using the binomial system invented by Carl Linnaeus.

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