

# Classification

**Theme:** To teach participants how to classify animals based on similarities they share.

## Background

**Age**

K-5

**Time**

60 min

**Outline**

Background

Activities:

Introduction

What is Classification

How do we classify an animal

Main Activity: Classify Game

Younger

Understanding

Main Activity

Wrap up

Learn the basics of the seven levels of classification, Kingdom, Phylum, Class, Order Family, Genus and Species. (King Philip Come Out For Goodness Sake)

The two main Kingdoms are plants and animals. Four other Kingdoms include bacteria, archaeobacterial, fungi and protozoa.

Phylum is separated into 30 phyla for animals. Phylum Chordata is characterized as the animals with backbones (Vertebrates) (chordate looks like a cord). Phylum Arthropods (Invertebrates) contains insects, spiders or any other animal with segmented bodies. They also have an exoskeleton on the outside of their bodies.

Class is separated into more sections within the Phylum. Example, Phylum Chordata (animals with backbones) is then separated into birds, mammals and reptiles.

Order is smaller groups within the different classes. For example, Lepidoptera is the order of moths and butterflies. Lepidoptera is under the class insects. Carnivora is the order of Mammalia.

Family is often Speculated about as many different sources will disagree on the family of the animal. The family of dogs is Canidae (carnivorous mammals that include wolves, jackal, foxes, coyote and the domestic dog)

Genus may only have one or two animals in it. If the animals are from the same genus, they are closely related. They may even look alike. When the genus is written it is capitalized and italicized. The genus of dogs and wolves is *Canis*.

Species is when two animals can breed together successfully. When an animal is called by its scientific name then it is being identified by its genus and species. Scientific name of dogs is *Canis familiaris*. Scientific name of wolves is *Canis Lupus*.



# *Program Activities*

## Introduction (1-2 minutes)

Objective: To inform the participants of what the class will be about

1. Welcome to the park
2. Introduction of staff
3. Talk about the schedule of the class
4. Ask children questions: What is your favorite animal? What is a mammal? Fish? Reptile etc?

## What is Classification? (20 minute PowerPoint or explanation)

Objective: To teach the participants about the seven levels of classification.

1. What is classification?
2. What are the seven levels of classification?
  - a. Brief description of each.

## How do we classify an animal? (10 minutes)

Objective: To teach participants

1. We categorize animals based on what they look like and the similarities of other animals
  - Give examples and build your way up the ranks adding on more animals that fall within that level.
  - The main part of this program will be to characterize the animals based on differences.

## Main Activity: Classifying Game (20 minutes)

Objective: To apply what the participants have learned from the PowerPoint into organizing animals into the different ranks.

1. Split the group up into groups of 4.
2. Make sure each group has a set of materials.



3. After they are finished cutting the pieces out have them separate the pictures into the two kingdoms (plants/animals)
4. Next, ask them to separate the animals based on one of the Phylum. This would be if the animal has a backbone or not. (Vertebrate/ Invertebrate)
5. Next, have them separate the animals into Classes (Mammals, Reptiles, Amphibians, Fish, Arthropods, Mollusks and Birds)
6. Next, Separate the Class of mammals into the Order of carnivores, omnivores, or herbivores.
7. Next separate the carnivores into Families (dogs, bears, etc).
8. Next find only one or two things that look alike and raise your hand to have it checked to find if it has the same Genus (things that have common characteristics)
9. Last should be the species of dog, Species are able to interbreed with each other. *Canis familiaris*

## Younger Understanding

Objective: To explain how animals are classified together. For grades 1-3 add more information to their learning experience.

1. Talk about how animals have hair, are warm-blooded and drink milk when they are babies.
  - a. Show them examples of mammals (puppets or photos)
2. Talk about how birds are warm-blooded, have wings, feathers, beak and their babies hatch from eggs.
  - a. Show them examples
3. Talk about how fish live in water, have gills to breath, scales and fins on their bodies and are cold-blooded.
  - a. Show them examples



#### Materials

- Plastic animal figures
- Puppets
- Organization chart

4. Talk about how amphibians spend part of their lives in water and part on land and are cold blooded.
  - a. Show them examples.
5. Talk about how reptiles have scales, breath air, are cold blooded and usually lay eggs on land.
  - a. Show them examples

### Main Activity

1. Have an organization chart that has three sections: fish, mammal, and bird.
  - a. For preschoolers make sure that there is a picture reference for them to look at.
2. Have the animal figures be on the desk and ask them to place the animal in the section they believe it to be.
3. Once done, go over each animal and why it was in the wrong or right section and describe the characteristics of it.
  - To enhance their understanding, use puppets to show them what is wrong with their placement.

### Wrap Up (5-10 minutes)

Objective: To review what the participants have learned.

1. What are the seven levels of classification (King Philip Come Out For Goodness Sake!)
2. Handout sheet and have them fill it out. (copy at the end of outline)
3. If the kids are younger, ask them if they can tell you two characteristics of a mammal, fish, or bird so you know they learned something.
4. Thank the participants for coming out.



## REFERENCES

[https://www.ducksters.com/science/scientific\\_classification.php](https://www.ducksters.com/science/scientific_classification.php)

<https://www.mensaforkids.org/teach/lesson-plans/classifying-animals/>

| <b>Animal</b> | <b>Lives where?<br/>(Land/sea/air)</b> | <b>Type of skin?</b> | <b>Size?<br/>(Bigger/smaller<br/>than a person)</b> | <b>Kind of babies?<br/>(Living or eggs)</b> |
|---------------|--|----------------------|---|---|
| cow           | land                                   | hide with short fur  | bigger  | live babies                                 |
| bear          |  |                      |   |   |
| fish          |  |                      |   |   |
| bird          |  |                      |   |   |
| whale         |  |                      |   |   |
| horse         |  |                      |   |   |

