# VERTEBRATES
## AND
# INVERTEBRATES

## What does it mean to classify?

Classify means to sort things into groups to show how they are alike
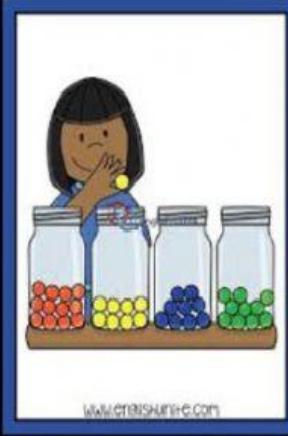
What does it mean to classify?

Classify means to _____.

What are 2 groups you can make to classify these animals?

What are the two groups that you could make to classify these animals?

Group 1_____ Group 2_____



Animals can also be classified by

being a vertebrate
or an invertebrate.

What do you think those are?

## What is a vertebrate?

Animals that have a backbone.
Frogs, birds, snakes, tigers

## What is an invertebrate?

Animals without backbones.
jellyfish, crabs, spiders, worms

What is a vertebrate? Animals that have a _____, give two examples _____ _____.

What is a invertebrate? Animals without a _____, give two examples _____ _____.

## What's the Difference?

| Vertebrate | Invertebrate |
| --- | --- |
| Well-developed skeleton and internal systems (have a backbone) | Lack a well-developed skeleton and internal systems (do not have a backbone) |
| Larger in size | Smaller in size |
| Have a covering on their body (feathers, skin, fun) | Jelly or fluid-filled have hard shells covering their bodies |
| Classified as mammals, amphibians, reptiles, birds, or fish | Have a simple nervous system and live by trusting their instinct |

Name a feature of a Vertebrae _____.

Name a feature of a invertebrate _____.

| Vertebrates | Invertebrates |
| --- | --- |
| Mammals | Cnidarian |
| Amphibians | Sponges |
| Reptiles | Arthropods |
| Fish | Mollusks |
| Birds | Echinoderms |

Vertebrates have a backbone, name two species of animals that fall under the category of Vertebrates. _____ _____ _____.

Invertebrates do not have a backbone name two species of animals that fall under the category of invertebrates. _____ _____ _____.



Mammals – warm blooded, fur/hair, give birth to live young

Amphibians – cold blooded, live on land or water, lay eggs, moist skin, webbed feet

The species of animals shown here are vertebrates because they have a backbone they are mammals and Amphibians Name a trait form each one Mammals _____ Amphibians _____

**Vertebrate Traits:**

Reptiles – cold blooded, scales, dry skin, lay eggs
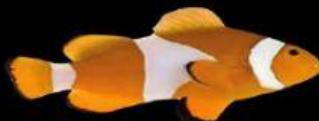
Fish – cold blooded, live in water, scales, fins, gills, lay eggs

Birds – warm blooded, feathers, fur, lay eggs

The species of animals shown here are vertebrates because they have a backbone they are Reptiles, Fish, and birds Name a trait of each one Reptiles _____

Birds_____ Fish_____.



**Invertebrate Traits:**

Cnidarian – live in water, tentacles, take in food through a central location on body

Sponges – live in water, filter water for food

Arthropods – live on land/water/ air, have legs

Invertebrates do not have backbones Cnidarian which is a Jelly fish do not have a backbone name a trait of the Jellyfish _____   Sponges _____.

Arthropods are also invertebrates they do not have a backbone name a trait _____.

### Invertebrate Traits:

Mollusks – have a muscular foot, live on land/water

Echinoderms – live only in water, take in food through a central location on body

The mollusks which is a snail in also an invertebrate and they do not have a

Backbone name a trait _____.

Echinoderms, which we know as Starfish are also invertebrates they do not have a backbone
Name a trait _____.



### How can you classify these?

WHAT GROUPD WOULD YOU CLASSIFY THESE ANIMALS IN VERTEBRATE OR INVERTEBRATE _____.

## How can you classify these?

WHAT GROUP WOULD YOU CLASSIFY THESE ANIMALS IN VERTEBRATES OR INVERTEBRATES _____.

WHEN YOU CLASSIFY SOMETHING YOU ARE PUTTING THEM INTO _____.

ANIMALS CAN BE A VERTEBRATE OR AN INVERTEBRATE, VERTEBRATES ARE ANIMALS WITH A _____.

ANIMALS WITHOUT A BACKBONE ARE CALLED _____.

THE FIVE MAIN GROUPS OF VERTEBRATES ARE MAMMALS, _____,

_____, _____, _____.THE FIVE MAIN GROUPS OF INVERTEBRATES ARE (CNIDARIAN/JELLYFISH) _____, _____,

_____, _____.