

All About Vertebrates

How to classify the five classes of Vertebrates

INTRODUCTION

Vertebrates are animals that have a backbone and an internal skeleton. There are about 40,000 different species of vertebrates in the world. These animals are broken up into five main groups: Fish, Amphibians, Reptiles, Birds, and Mammals. Animals within each group share certain physical characteristics. You can use these physical traits to help classify other animals into one of the five groups.

MAMMALS

Mammals are one of the more familiar groups of vertebrates. They include animals like dogs, cats, and squirrels. Mammals are classified by having fur or hair that covers their bodies. Not all mammals will be furry, though.



Animals like elephants, dolphins, and humans are classified as mammals even though they don't have a thick coat of fur like a bear. Almost all mammals give birth to live young and they are warm-blooded.

BIRDS



Birds are the only group of living vertebrates that are covered in feathers.

Feathers are actually modified scales. Birds also have wings and beaks, as well as walk on two legs, although these characteristics are shared by other groups. Birds are warmblooded. All birds lay eggs, but not always in a nest.

Reptiles are another group of vertebrates.
Most people think about snakes and lizards when they think of a reptile.

This group also includes crocodiles, alligators, turtles, and dinosaurs. Reptiles have thick scales and usually prefer to live in dry environments.

They are cold-blooded and some species lay eggs, like crocodiles and turtles, but some reptiles can give birth to live young, like some lizards.

Reptiles breathe through their lungs and live in many different types of environments.





Amphibians are a group of vertebrates that share certain physical characteristics.

All amphibians have thin, moist skin that helps them take in oxygen from their surroundings, but most still have lungs.

Some species even have gills! Amphibians also lay their eggs in water, such as ponds. There are three main animals that are classified as amphibians: frogs and toads, salamanders, and caecilians.

Fish are classified as vertebrate animals that have scales, gills, fins, and live only in water. Some other physical characteristics of fish include being coldblooded, have tails, and lay eggs.



Most species of fish do not have lungs. Instead, they use their gills to breathe. Fish do not breathe water, as some may think, but they breathe oxygen like animals on land. The gills are able to pull oxygen from the water and be ab-

SUMMARY

- There are five classes of vertebrates.
- The groups are: mammals, birds, reptiles, amphibians and fish.
- Each group has different physical characteristics.
- Groups are classified by these different physical characteristics.