

The Animal Kingdom: From a Speck of Dust To the Ocean Depths!

It's hard to believe, but the tiny dust mite that lives its entire life under your bed and the great blue whale that travels the ocean depths are related. The Animal Kingdom is the largest kingdom and is made up of widely varied creatures. There is a newly discovered phylum in this kingdom made up of only one species. This species lives around the mouth of the Norway lobster. Compare this to the large chordates phylum of the Animal Kingdom that contains geckos, rattlesnakes, trout, robins, elephants, and your pet dog or cat!

Organisms of this kingdom must get food by eating other living things. Some animals like your house cat are carnivores. This means they eat meat. A wolf is a predator that eats moose, deer, and other creatures. Animals such as an African elephant are herbivores. This great creature enjoys the grass and vegetation of the savannah. Omnivores such as raccoons will eat both meat and plants. Some of these animals search for food during the day while others prowl around at night. They are nocturnal.

Animals are able to move around to find their food and reproduce. Birds such as the Arctic tern migrate from the North Pole to areas far below the equator to enjoy a habitat of warmth and plenty. Salmon brave many elements as they return to the river where they were born. This is the only place where they will reproduce. Some birds such as the swift seem to be in constant

motion. Even sea anemones that seem to be rooted to the ocean floor have moving “arms” to reach out and grab food!

Most animals have brains. We are still learning the many ways an animal’s brain works. How do monarch butterflies find their way from Mexico to their summer homes in the north? Why do dolphins seem to take special care with sick or injured humans? These and many other animal questions make interesting research for biologists.

Most organisms in the Animal Kingdom have skeletons. This helps to support the weight of these living things. People have skeletons inside their bodies. Elephants have huge backbones to support their massive frames. Other members of the Animal Kingdom such as spiders have exoskeletons. Exoskeletons are found on the outside of an organism’s body. Creatures such as spiders shed these skeletons so they can grow.

There are many different phyla in this kingdom. As with the other kingdoms, new discoveries are constantly occurring. This means the classification system is always updated. Right now, science books describe about 30 phyla. Some of the phyla with a smaller number of creatures include the roundworm, comb jelly, and sponge phyla.

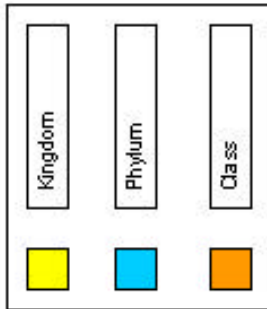
The arthropod phylum contains many organisms. There are classes in this phylum that are “home” to insects such as cockroaches, ants, and beetles. Arachnids, made up of spiders, ticks, and scorpions is another class in this phylum. It might surprise you to learn that horseshoe crabs are part of the arachnid phylum. They are not crabs at all but relatives of spiders and scorpions!

It might seem hard to believe but birds, fish, amphibians, reptiles, and mammals all belong to one phylum within the Animal Kingdom. This phylum is the chordate phylum. Most people think the chordate phylum contains animals with backbones, but this is not true! It is a rod of supporting tissue called a **notochord** that connects the organisms in this phylum. All of these animals had a notochord at one time in their lives. In some animals this becomes a backbone. In other animals the notochord is the beginning of a backbone. Many people make the mistake of using the words backbone and notochord as synonyms.

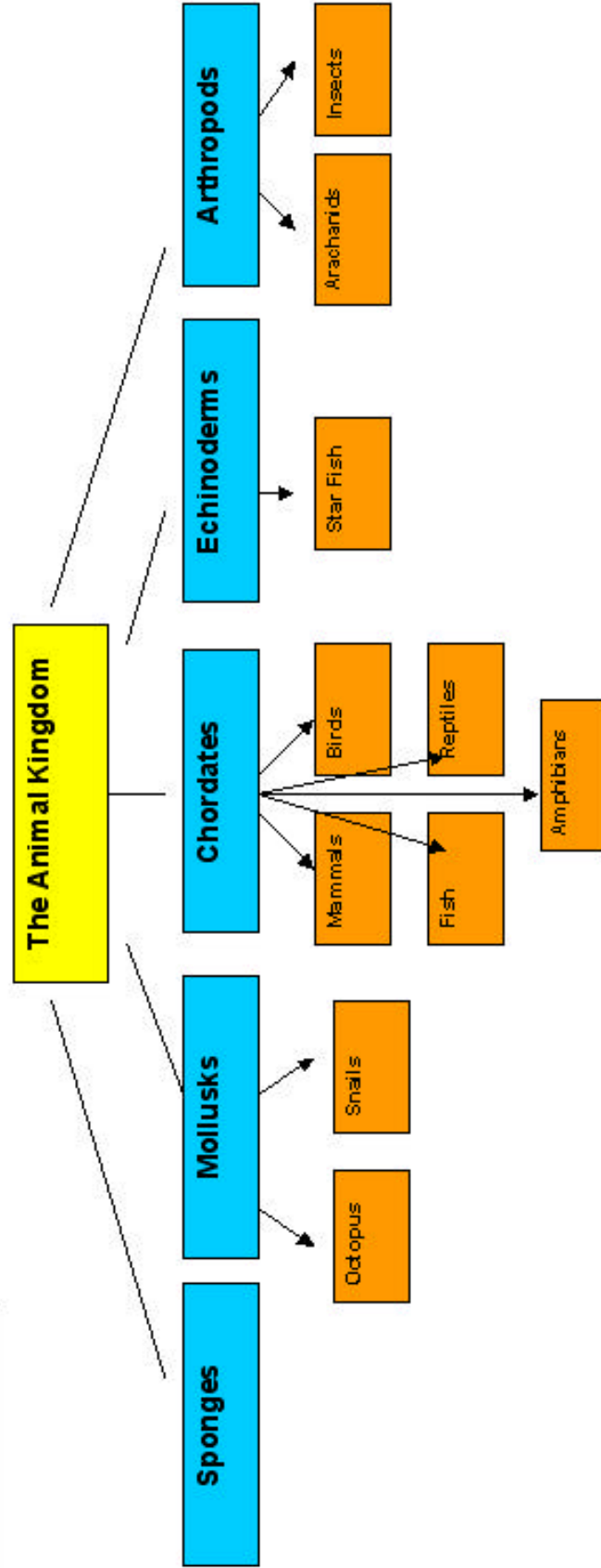
The Animal Kingdom is already the king of kingdoms in size, but many scientists believe there are about 15 million more invertebrates (animals without notochords) yet to be discovered, identified, and added to this kingdom!

Notochord, omnivore, predator, and nocturnal are some of the many different vocabulary words that will help you understand the animal world around you. There are many games and activities at www.missmaggie.org designed to increase your knowledge and understanding of this important kingdom. Visit the field guide in "Herd of Elephants?" Parts 1 and 2 to learn more about mammals, reptiles, and amphibians. Look under the microscope in "Herd of Elephants?" Part 1 to understand the classification of arachnids and insects. Watch "A Great Catch" and explore the many activities there to find out more about the organisms that inhabit our waters. You can even visit the Game section to classify animals in an exciting way!

Look at this chart to help you better understand the varied phyla in the Animal Kingdom:



**A Chart of Five Phyla in the Animal Kingdom
and Examples of Major Classes Within Each
Phylum**



Wow – as you can see the chordate phylum contains many, many animals. You could spend a lifetime exploring just this part of the Animal Kingdom!