LESSON.

28

Taxonomy

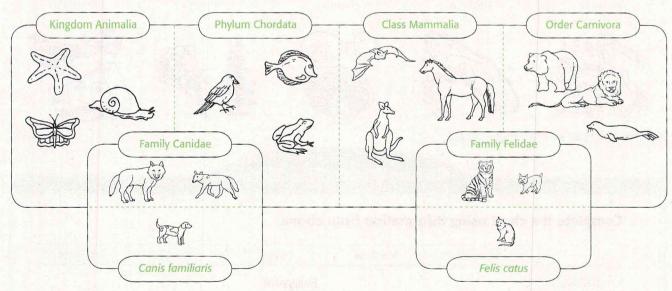
How are the members of each kingdom classified into smaller categories?

The science of classifying organisms is called **taxonomy**. **Kingdom** is the largest of the taxonomic categories. Organisms within a kingdom are further classified into smaller and smaller categories. For example, each member of the Animal Kingdom is placed in a **phylum**. Each phylum is further separated into **classes**, classes are separated into **orders**, and orders are separated into **families**. Finally, each member of a family is assigned to a **genus**, and the members of each genus are assigned to a **species**, the smallest of the taxonomic categories.

A specific organism is named using its genus and species. For example, the scientific name for a human being is *Homo*

sapiens. Humans belong to the genus *Homo* and the species sapiens.

The smaller the taxonomic category, the greater the similarity among the species assigned to that category. For example, the domestic dog belongs to the same genus as wolves and coyotes. Dogs, wolves, and coyotes belong to the Order Carnivora, along with bears, cats, walruses, seals, and many other meat-eating animals. All members of the Order Carnivora belong to the Class Mammalia, which also includes bats, monkeys, kangaroos, and horses. All members of the Class Mammalia belong to the Phylum Chordata, which also includes birds, reptiles, amphibians, and fish.



Dog and cat taxonomies

Show What You Know

Which would have more in common, two animals of the same class or two animals of the same order? Explain.