

Active:

- Come up with a clever way to remember the order of classification.
- What are the levels of classification in order? Try to do it from memory.

The Linnaean System

- The category domain has been invented since Linnaeus' time.
- This category recognizes the most basic differences among cell types, eukarya, bacteria, and archaea.
- All living things are now grouped into one of three domains.
- The category kingdom encompasses large groups, such as plants, animals, or fungi and is general.
- The category genus is made up of species with uniquely shared traits, such that the species are thought to be closely related.
- A species is usually defined as a unique group of organisms united by heredity or interbreeding.
- In practice, scientists tend to define species based on unique features.
- For example, *Homo sapiens* is recognized as the only living primate species that walks upright and uses spoken language.

Summary

- Biologists use taxonomic systems to organize their knowledge of organisms. They attempt to provide consistent ways to name and categorize organisms.
- All scientific names for species are made up of two Latin or Latin-like terms.
- In the Linnaean system of classification, organisms are grouped at successive levels of a hierarchy based on similarities in their form and structure. The eight levels of modern classification are domain, kingdom, phylum, class, order, family, genus, and species.
- **Scientific names** follow a specific set of rules. Scientists use a two-name system called a **Binomial Naming System**. Scientists name animals and plants using the system that describes the genus and species of the organism.