

Vocabulary: Classifying Organisms

- Autotrophic – describes an organism that is able to synthesize its own food using inorganic materials.
 - Plants, photosynthetic bacteria, and chemosynthetic bacteria are all examples of autotrophs. Some protists are autotrophs as well.
- Domain – the highest taxonomic rank of organisms.
 - There are three domains: Archaea, Bacteria, and Eukarya.
- Heterotrophic – describes an organism that must consume other organisms or organic materials for food.
 - All animals and fungi are heterotrophs.
- Kingdom – The second highest taxonomic rank of organisms.
 - There are six kingdoms: Animalia, Archaeobacteria, Eubacteria, Fungi, Plantae, and Protista.
- Taxonomic classification – the use of a hierarchy, or ranking, to classify organisms into smaller and smaller groups of related organisms.
 - Biologists classify organism into several different groups. The largest group is a domain. Domains are subdivided into kingdoms, which are further subdivided into phyla, classes, orders, families, genera, and, finally, species.