

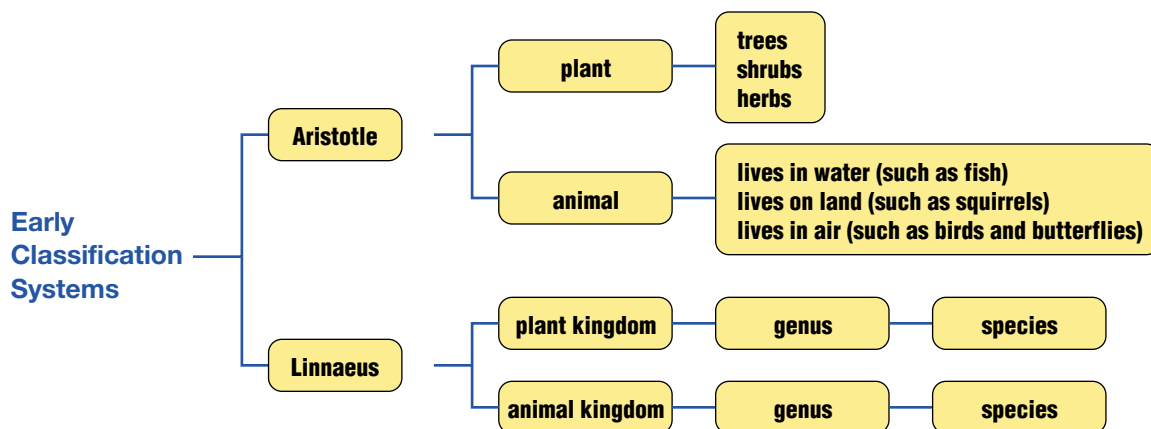
Classifying Living Things

Over 2000 years ago, the Greek philosopher Aristotle developed a system of classification that grouped organisms according to whether they were plant or animal. Scientists used Aristotle's system for hundreds of years, but as they discovered more and more living things, the system did not work well because it did not show probable relationships between similar organisms.

In 1735, Carolus Linnaeus produced a new system that also classified all organisms as plant or animal, but this new system was very different in other ways from Aristotle's system.

Linnaeus' system gives a two-word name to each type of organism. This system of naming organisms is still in use today. The two-word name is called the organism's scientific name, and it is given in Latin, a language that is no longer spoken. The first word of the organism's name is its genus, and the second word is its specific name. A **genus** is a group of species that are related. A **species** is the smaller, more limiting classification grouping. A species name includes both the genus name and specific name. For example, the dog shown above on the left and the wolf shown on the right are members of the same genus, *Canis*. The dog, however, is the species *Canis familiaris*, while the wolf is the species *Canis lupus*.

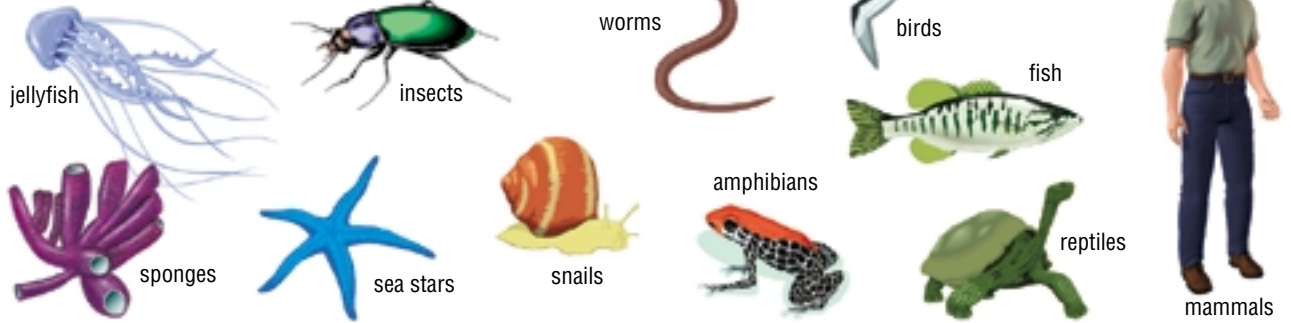
By the 1900s, scientists had discovered a great diversity of organisms on Earth. Separating organisms into only two main groups or **kingdoms**, plant and animal, began to seem inadequate. For example, bacteria are just too different from either plants or animals to be grouped with either. Similarly, fungi such as bread mould, yeast, and the many kinds of mushrooms are very different from plants and animals. In 1969, Robert Whittaker proposed a system that classifies organisms into five different kingdoms. The illustrated table on the next page shows the major groups of organisms and their kingdoms.



All Living Things

Animal Kingdom

Consumers • Most move



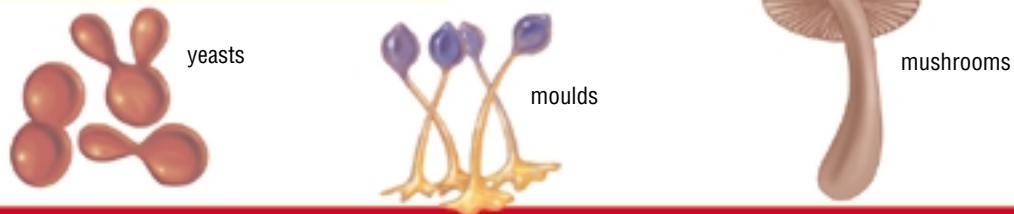
Plant Kingdom

Producers • Do not move



Fungi Kingdom

Absorb food from surroundings • Do not move



Protist Kingdom

Consumers and producers • Some move



Monera Kingdom

Consumers and producers • Some move

