

CLASSIFICATION REVIEW



Classification is grouping things together according to similarities, 2

The science of classifying living things is called taxonomy. Scientists who classify living things are called taxonomists. 3



The ancient Greek philosopher Aristotle classified organisms as either plants or animals. This was the first classification system.



In the 18th century, a Swedish botanist named Carolus Linnaeus classified organisms according to their physical characteristics.



Linnaeus, a botanist which means that he studied plants, grouped organisms together because they resembled each other.

Linnaeus is known as the "father of modern taxonomy."



Organisms that are classified in the same group are alike in some ways.

Altogether, there are classification levels: Domain KINGDOM PHYLUM CLASS ORDER FAMILY GENUS SPECIES

To help you remember the seven classification levels, learn this mnemonic device: Domain= Do Kingdom = Kings Phylum = Play Class = Cards Order = On Family = Fat <u>Genus</u> = Green Species = Stools

The largest classification group is a <u>domain</u>.



A <u>species</u> is the smallest classification group.



A <u>genus</u> is made up of two or more species that are very much alike.



In Carolus Linnaeus's classification system, each kind of organism is identified by a two-part scientific name also known as binomial nomenclature. For example, a human's scientific name is Homo sapiens.



At one time, all organisms were classified as either plants or animals.

However, studies showed that a fungus and a plant were not as closely related as previously thought.

Another kingdom is the Eubacteria. They are singlecelled organisms that are the smallest living things. These organisms do not have a true nucleus.

Formerly part of the kingdom monera Microbiologists who study bacteria determined that the DNA of Archaebaterica are much different from other, true bacteria Most Archaea live in extreme conditions

The Protista kingdom, or protists, are simple, unicellular or multi-cellular organisms. They do have a true nucleus. Amoebas and diatoms are in this kingdom.

The Fungi Kingdom are unicellular or multi-cellular plantlike organisms. These organisms get the food they need from dead organisms like a rotting log. Organisms like yeast and mushrooms are in this kingdom.

Plants or the Plantae Kingdom, are multi-cellular organisms. These organisms, known as autotrophs, use chlorophyll to make their own food. Trees and flowers are in this kingdom.

The Animalia Kingdom, or animals are multi-cellular organisms that get their food from eating organisms like plants and/or other animals. Birds, reptiles, fish, and mammals, as well as humans, are in this kingdom.

