

Classification

- Scientists who classify things are **taxonomists**.
- It's their job to look at every living thing to determine how similar /different they are.
- The division of living things into categories based on specific characteristics.

Carolus Linnaeus (lived in 1700's)

- Swedish physician and botanist
- Founded Taxonomy
- Taxonomy - the science of identifying, classifying and naming living things.
- Today taxonomists still classify organisms based on presumed evolutionary relationships.
- Carolus Linnaeus simplified the naming of living things by giving them a scientific name. His ideas are the bases of taxonomy

The levels of Classification:

Dear King Philip Came Over For Great Spaghetti

Gets more specific as it goes down

- Domain
- Kingdom
- Phylum
- Class
- Order
- Family
- Genus
- Species

Domains

- Bacteria (Prokaryotes)
- Archaea
- Eukarya (Eukaryotes)

Kingdoms: 6 general kingdoms

- 1) Plants
- 2) Animals
- 3) Fungi
- 4) Protists
- 5) Archaeobacteria
- 6) Eubacteria

Scientific Names

- By classifying organisms biologists are also able to give them scientific names.
- Linnaeus simplified the naming of organisms by giving them a two part scientific name.
- Part 1 – **identifies the genus** (smallest group of a specific species)
- Part 2 - **identifies the species**
- Scientific names are in Latin or Greek
 - Example: *Elephas maximus*
 - No other species has this name, it refers to as the Indian elephant (the common name)

Dichotomous Key

- It helps scientists identify organisms as it uses sequential pairs of descriptive statements
- consists of several pairs of descriptive statements that have only TWO alternative responses
- By working through the statements in the key you can eventually identify an organism.
- Who am I
 - I do not fly, I have fur on my tail, I do not have a black mask across my face, I am not brown and white, I am not black with white stripes, I have long ears.