Classification of Life
Kingdoms and Domains

The three-domain system
- Bacteria
- Archaea
- Eukarya

The six-kingdom system
- Bacteria
- Archaea
- Protista
- Plantae
- Fungi
- Animalia

The traditional five-kingdom system
- Monera
- Protista
- Plantae
- Fungi
- Animalia
Six Kingdom Classification

1) **Kingdom Animal**

CHARACTERISTICS:

- are multicellular.
- can move from place to place.
- cannot make their own food. (heterotroph)
2) **Kingdom Plant**

characteristics:
- make their own food through photosynthesis.
- can be large and multicellular (redwoods)
- or unicellular (plankton)
- Have shoots and roots
- autotrophs
3) **Kingdom Fungi**

- can not move.
- can not make their own food.
- absorb food from dead material.

Ex. mushrooms, mold, yeast.
4) Kingdom Protist

- are unicellular.
- have traits of both plants and animals.
- have a true nucleus (eukaryote)
- some move and some don't
  Ex. Euglena,
  - can move but it has chloroplasts (allows for photosynthesis)
  - ex: amoeba, some algae
5) Kingdom Eubacteria

Ex. strep. E-coli, salmonella

Cyanobacteria, also called blue-green algae,

The Eubacteria are an ancient and diverse group and live almost everywhere

Can be a heterotroph or autotroph
Kingdom Archebacteria

Ex. Stromatolites, salt lovers, heat lovers
-Archebacteria are ‘older’ and more primitive and can live in harsh conditions.
-Single celled with no nuclei (prokaryotes)
These kingdoms were formed when **Kingdom Monera** was split into two.
The five kingdom system was used before Archaebacteria was found to be different chemically than eubacteria.