Six Kingdom Classification

EUBACTERIA

- Prokaryotes
- Unicellular
- Asexual reproduction through binary fission
- Cell wall contains peptidoglycan
- Some are autotrophs or heterotrophs
- Some are decomposers/saprophytes
- Some are pathogens that cause disease
- Some are beneficial
- Includes blue-green algae called cyanobacteria that contain chlorophyll but no chloroplasts, contain ribosomes
- Examples include *E. coli*, nitrogen-fixing bacteria, and *B. anthracis*
- *Live evervwhere*

ARCHAEBACTERIA

- Prokaryotes
- Unicellular
- Asexual reproduction through binary fission
- Cell wall w/o peptidoglycan
- Found in harsh environments like
  - volcanoes
  - salt marshes
  - hot springs
  - very acidic environments
- Some are autotrophs, but most are heterotrophs that use inorganic chemicals
- Contain ribosomes
- Examples include methanogens, halophiles, and thermophiles

PROTISTS

- Eukaryotes
- Unicellular, some multicellular
- Most live in moist environments
- Plantlike ones are autotrophs
- Animallike ones are heterotrophs; some may cause diseases
- Funguslike ones use absorption to get nutrients
- Move by means of flagella, cilia, or pseudopods
- Ribosomes & mitochondria, some have chloroplasts, some have cell walls of cellulose
- Examples include amoebas, *Paramecium*, *Euglen*a, algae, and slime molds

FUNGI

- Eukaryotes
- Multicellular (1 exception = yeast)
- Heterotrophs that use absorption to obtain nutrients, immobile
- Decomposers/saprophytes
- Cell wall made of chitin, ribosomes & mitochondria
- Asexual or sexual reproduction
- Examples include mushrooms, molds, ringworm, yeast, athlete's foot, *Penicillium*

PLANTS

- Eukaryotes
- Multicellular with specialized tissues and organs
- Autotrophs, immobile
- Cell wall made of cellulose
- Chloroplasts, mitochondria, ribosomes
- Sexual reproduction in all plants
- Simpler plants live near water
- Some use male and female sex cells called gametes in special organs

Flowers **Cones**

- Examples include mosses, ferns, flowering plants, trees, cactus

ANIMALS

- Eukaryotes
- Multicellular with specialized tissues and organs
- Heterotrophs. ,mobile
- Ribosomes, mitochondria
- Asexual/Sexual reproduction in some
- Sexual reproduction – most other animals produce male (sperm) and female (eggs) sex cells called gametes in special organs
- Examples include sponges, sea anemones, starfish, worms, insects, crustaceans, mollusks, fish, amphibians, reptiles, birds, and mammals