Taxonomy: The branch of biology concerned with naming and classifying organisms.

Organisms were first classified more than 2,000 years ago by the Greek philosopher Aristotle.



Five Kingdoms of Living World:

1. Kingdom: Monera (Procaryotae):

- Prokaryotes
- Unicellular: Single celled organisms.
- Lack nuclear membrane around DNA.

♦ Lack membrane bound organelles (mitochondria, chloroplast, golgi, endoplasmic reticulum).

♦ Have a cell wall.

♦ Include: Bacteria.

2. Kingdom: **Protista**

♦ Eucaryotes

♦ Unicellular or simple multicellular.

♦ Have nuclear membrane around DNA

. ♦ Have membrane bound organelles (mitochondria, chloroplast, golgi, endoplasmic reticulum).

♦ Most are larger and more complex than bacteria.

♦ Some have cell walls, others don't.

♦ Include: Protozoa, algae, slime molds

3. Kingdom: **Fungi**

♦ Eucaryotes

♦ Most are multicellular.

♦ Have nuclear membrane around DNA.

♦ Have membrane bound organelles (mitochondria, chloroplast, golgi, endoplasmic reticulum).

♦ Have cell walls.

♦ Include: Mushrooms, yeasts, and molds.

4-Kingdom: **Plantae**

♦ Eucaryotes

♦ Complex multicellular organisms.

♦ Have nuclear membrane around DNA.

♦ Have membrane bound organelles (mitochondria, chloroplast, golgi, endoplasmic reticulum).

♦ Cellulose cell walls.

♦ Include: Trees, flowering plants, and mosses.

5-Kingdom: Animalia

♦ Eucaryotes

♦ Complex multicellular organisms.

♦ Have nuclear membrane around DNA.

♦ Have membrane bound organelles (mitochondria, chloroplast, golgi, endoplasmic reticulum).

♦ Lack cell walls.

♦ Include: Spong