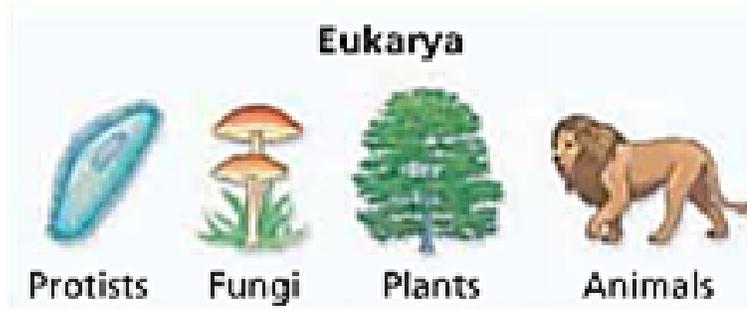


## DOMAIN EUKARYA

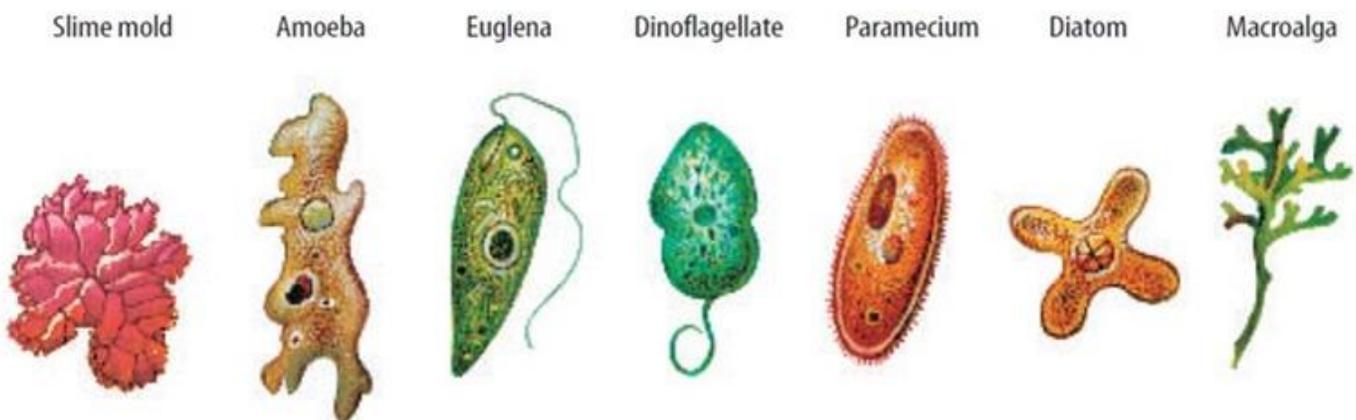
- Kingdoms within the Domain Eukarya are include **Protista, Fungi, Plantae and Animalia**



- All contain organisms composed of **eukaryotic cells**  
= cells containing an organized membrane-bound nucleus and organelles which perform a variety of functions
- Most members of this domain are multicellular and macroscopic, however there are a few unicellular, microscopic groups

## PROTISTA KINGDOM

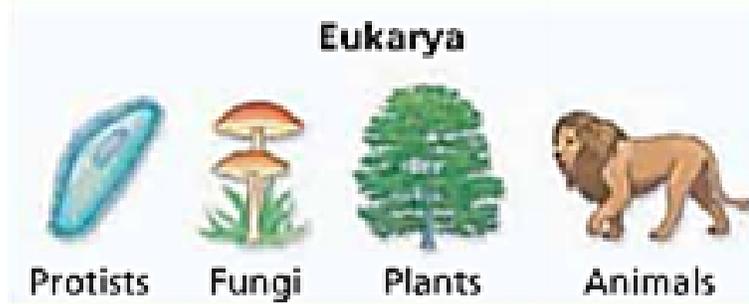
- Contains “plant-like”, “animal-like” and “fungi-like” organisms  
= the JUNK DRAWER of taxonomy
- General Characteristics
  - **eukaryotic (true nucleus)**
  - **microscopic**
  - contain specialized ‘**organelles**’
  - most are **aquatic** (fresh water or marine)
  - most are **unicellular**, but may live in **colonies**



- Made up of 3 distinct groups based on nutrition
  - **Animal-like Protists (Protozoans)**
    - = **heterotrophs** (take in food)
    - 4 groups based on movement
      - Sarcodinians => move by extending their cytoplasm
        - pseudopod: extension of cytoplasm used to move and obtain food
        - example: Amoeba
      - Zooflagellates => move via whip-like flagella
        - example trichonympha
      - Ciliphorans => use hair-like cilia example: Paramecium
      - Sporozoans => no structure for movement, use host to survive, example Plasodium (causes malaria)
  - **Plant-like Protists**
    - = **autotrophs** (contain chlorophyll and photosynthesize)
    - includes many of the algae phyla
      - Unicellular algae
        - a. Dinoflagellates => algae with **2 flagella**, usually marine
        - b. Diatoms => Cell walls have **silica**, abundant in Oceans
        - c. Euglenoids => no cell walls, but perform **photosynthesis**
      - Multicellular Algae
        - => similar to land plants, but different because of its reproduction
        - => Grouped based on color
          - (ALL have chlorophyll, but **masking pigments** affect color)
          - a. Green algae
          - b. Red algae
          - c. Brown Algae
  - **Fungi-like Protists**
    - = heterotrophs (**saprophytes or parasites**)
    - **reproductive structures** like fungi, example Slime Molds
- Roles of Protists
  - a. **Food** for others (plankton)
  - b. Some eat **bacteria**
  - c. Help produce **oxygen**
  - d. Breakdown dead plants and animals (**decomposers**)
  - e. Some cause **diseases**

## DOMAIN EUKARYA

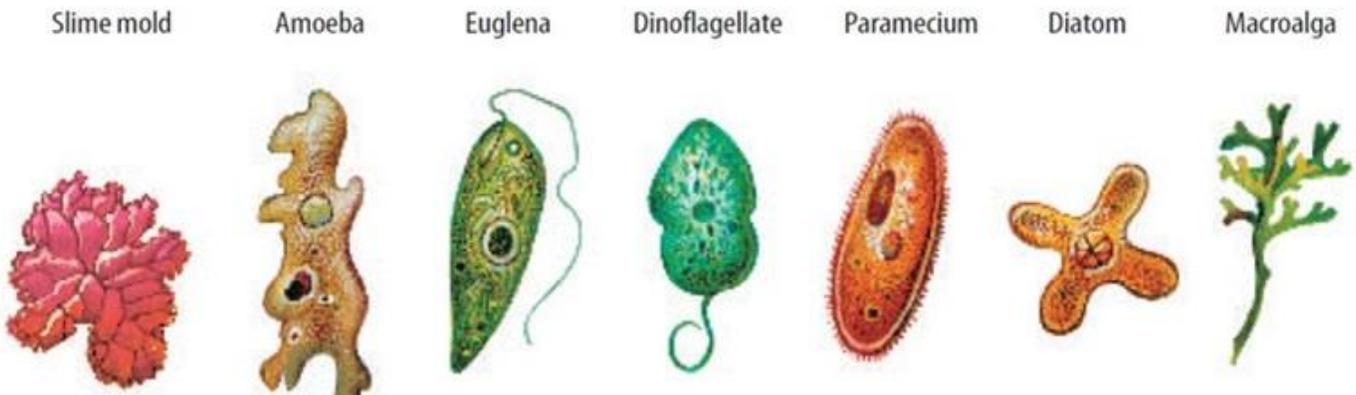
- Kingdoms within the Domain Eukarya are include \_\_\_\_\_



- All contain organisms composed of \_\_\_\_\_  
= cells containing an organized membrane-bound nucleus and organelles which perform a variety of functions
- Most members of this domain are multicellular and macroscopic, however there are a few unicellular, microscopic groups

### **PROTISTA KINGDOM**

- Contains “plant-like”, “animal-like” and “fungi-like” organisms  
= the JUNK DRAWER of taxonomy
- General Characteristics
  - \_\_\_\_\_
  - \_\_\_\_\_
  - contain specialized \_\_\_\_\_
  - most are \_\_\_\_\_ (fresh water or marine)
  - most are \_\_\_\_\_, but may live in \_\_\_\_\_



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