

Protists

Kingdom Protista

- Conglomerate of organisms which do not fit into other 5 Kingdoms
- Bacteria, Eubacteria, Animalia, Plantae, Fungi
- They represent the intermediate step in the evolution of the other three kingdoms
- Protozoan is the Greek word for "first animal"
- Contains about 65,000 species

Kingdom Protista

- Made up of a complex eukaryotic cell (unicellular) or cells (multicellular)
- Can inhabit aquatic or terrestrial environments
- Some members make their own food (autotrophs)
- Some ingest food from outside (heterotrophs)

Divided into 3 Subcategories

- | | | |
|--|-------------|----------------------|
| Animal like | Fungus Like | Plant like |
| • Heterotrophs, grouped by locomotion | slime mold | Contains chlorophyll |



Animal Like Protists

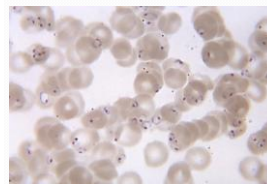
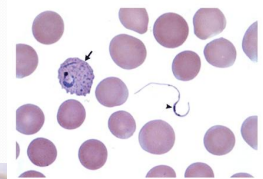
- All heterotrophs
- classified by the 4 ways they move:
- 1) **Cilia** - Coordinated tiny beating hair-like structures movement between individual cilia ex. *Paramecium*



- 2) **Flagellum(a)** - whip-like tail(s) Back and forth wave motion ex. *Plasmodium*




Plasmodium



3) **Pseudopodia** - projection of cytoplasm that sticks out like a foot ("false foot")

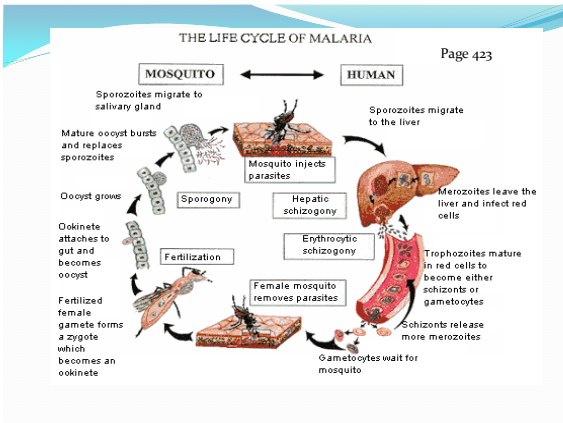
Ex. *Amoeba*



4) **Sessile** - No locomotion (no movement)

Characteristics of Sporozoans (Animal-like)

- Sporozoa do not move on their own
- protist that reproduce by forming spores
- mostly common in tropical areas
- they are usually parasitic
- sporozoans named *Plasmodium* causes malaria
- humans get malaria when bitten by an infected mosquito



Plant Like Protists

- Have chlorophyll
- Make their own food
- They can live in 4 main environments:
 1. Soil
 2. tree bark
 3. freshwater
 4. salt water
- they produce large amounts of oxygen which are used by other living organisms
- they are grouped according to color & structure
- into 5 main groups:

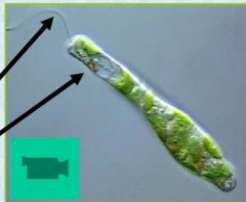
Plant Like Protists

1. Red dinoflagellates
2. Algae
3. Diatoms
4. Dinoflagellates
5. Euglena

PLANT-LIKE PROTIST Cont'd

A) **Euglena**-

- one celled alga that moves with one **flagellum**
- lives in fresh water
- reproduces asexually
- **red eyespot** near front end to find light...Why?
- have chlorophyll and can make their own food (**autotroph**)

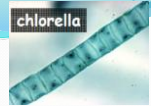


b) Red Tides caused by Dinoflagellates



C) Green Algae

- Come in many different forms
- can be unicellular or multicellular
- they produce O₂ in H₂O
- usually found in "colonies"
- serve as food for fish, snails, and crayfish
- Colony – a group of cells that live together



Fungus Like Protists

Slime Molds:

- fungus-like protists that are consumers
- live in cool, damp places
- EX: forest floor
- feed on bacteria growing on rotting logs and decaying leaves
- some are parasites (very few)



Fun Work

Viruses

- Page 400-411 (read)
- Page 405 Q 1,2,3,6
- Page 411 1,2,3,6
- + Start working on Bacteria and Viruses Assignment

Protist Homework:

- 1 worksheet Common protists on page 420-425