

TYPES OF PROTISTS

Meeting the Misfits

Three Types

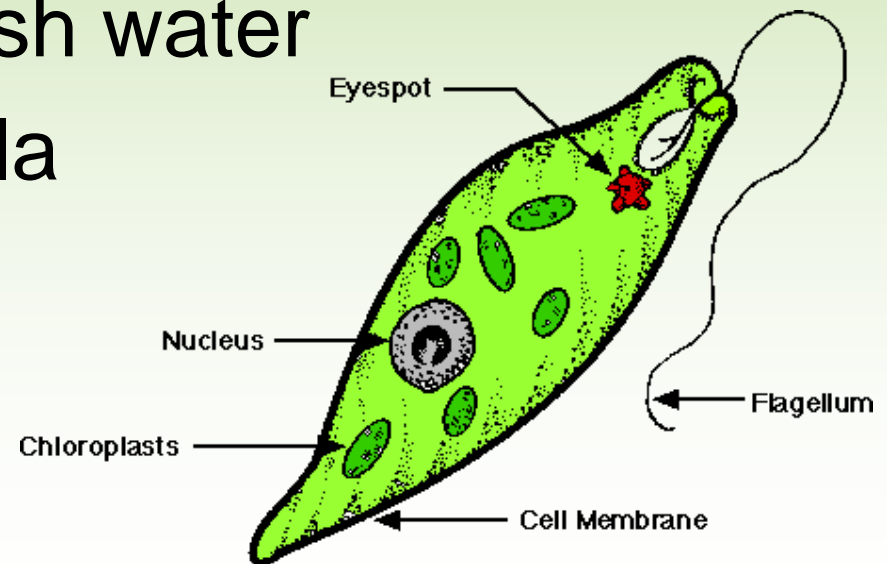
- Plant-like Protists
- Animal-like Protists
- Fungus-like Protists

Plant-Like Protists

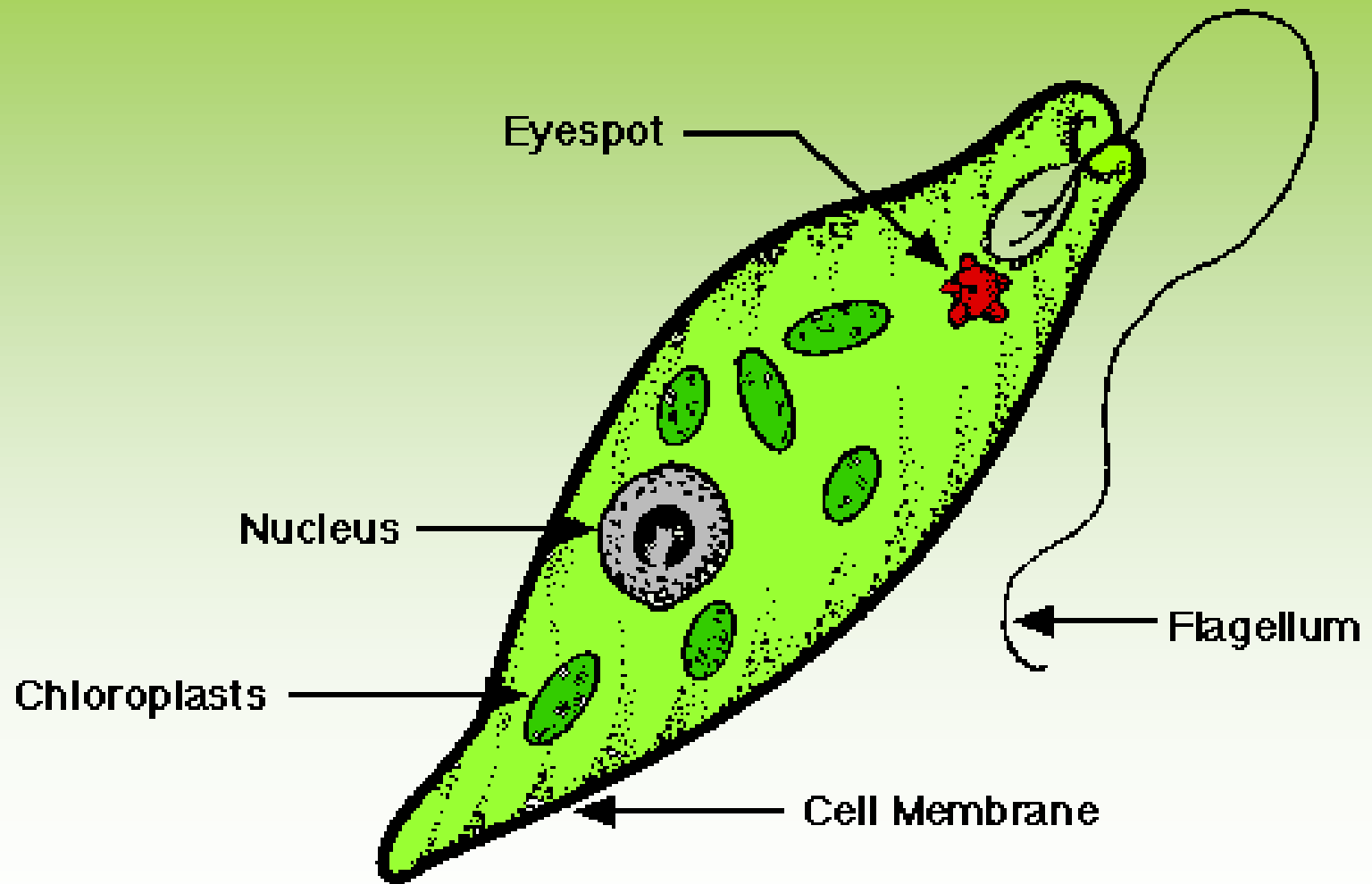
- Producers
- Live in soil, bark, fresh water or salt water
- Produce oxygen (important job!)
- Examples:
 - Euglenoids
 - Dinoflagellates
 - Diatoms
 - Algae (green, red & brown)

Euglenoids

- Producers when sunny
- Heterotrophs when dark
- Unicellular
- Found mostly in fresh water
- Some have a flagella



Euglena Diagram



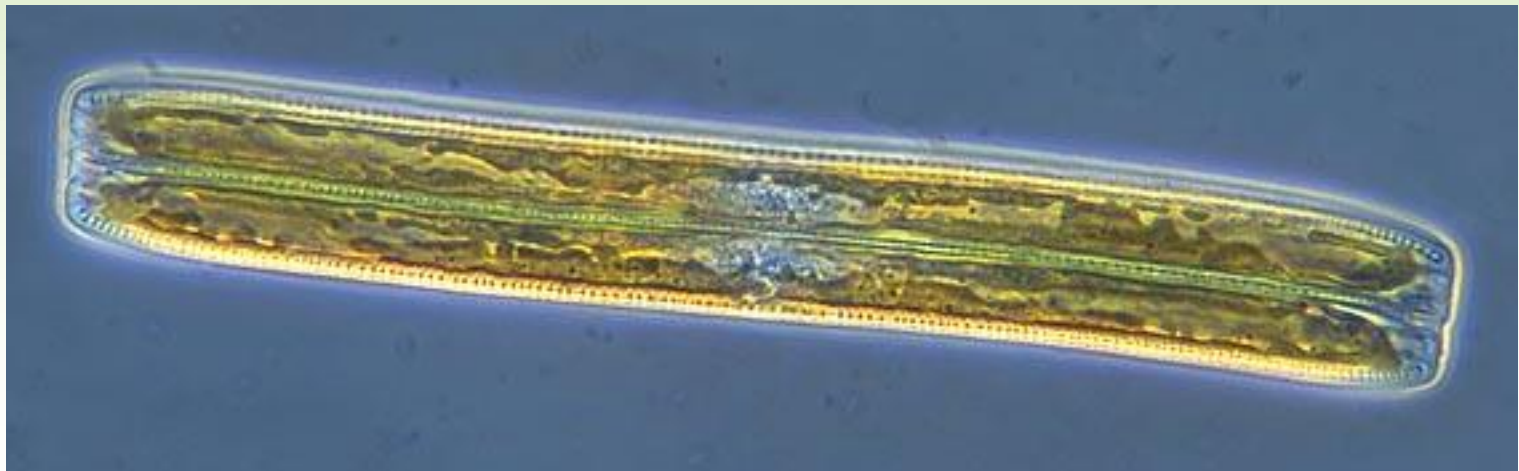
Dinoflagellates

- Unicellular
- Covered by stiff plates
- Have two flagella
- May glow in the dark
- Found in the ocean



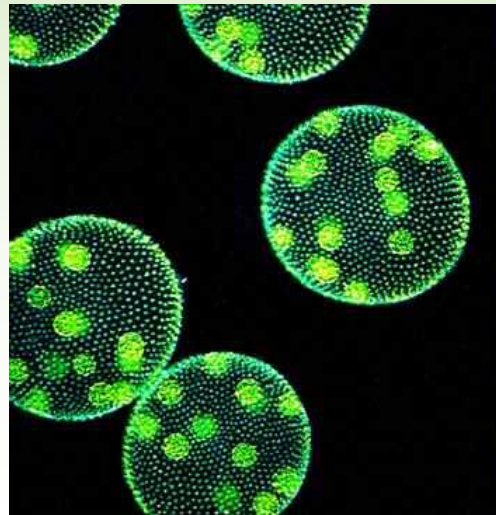
Diatoms

- Unicellular
- Glass-like cell walls
- Used in toothpastes, scouring products and as filters



Green Algae

- Green due to chlorophyll
- Mostly unicellular but some form colonies and a few are multicellular
- Live in fresh water, salt water, and a few on land
- Ex: Volvox





Red Algae

- Multicellular
- Commonly called sea weed
- Live in deep salt water
- Used in ice cream and hair conditioner
- Eaten in some Asian cultures

Brown Algae



- Multicellular
- Commonly called sea weed
- Have large “leaves” called blades
- Have sacs called air bladders
- Have “roots” called holdfast
- Live in salt water
- Used in pudding & salad dressing

Animal-Like Protists

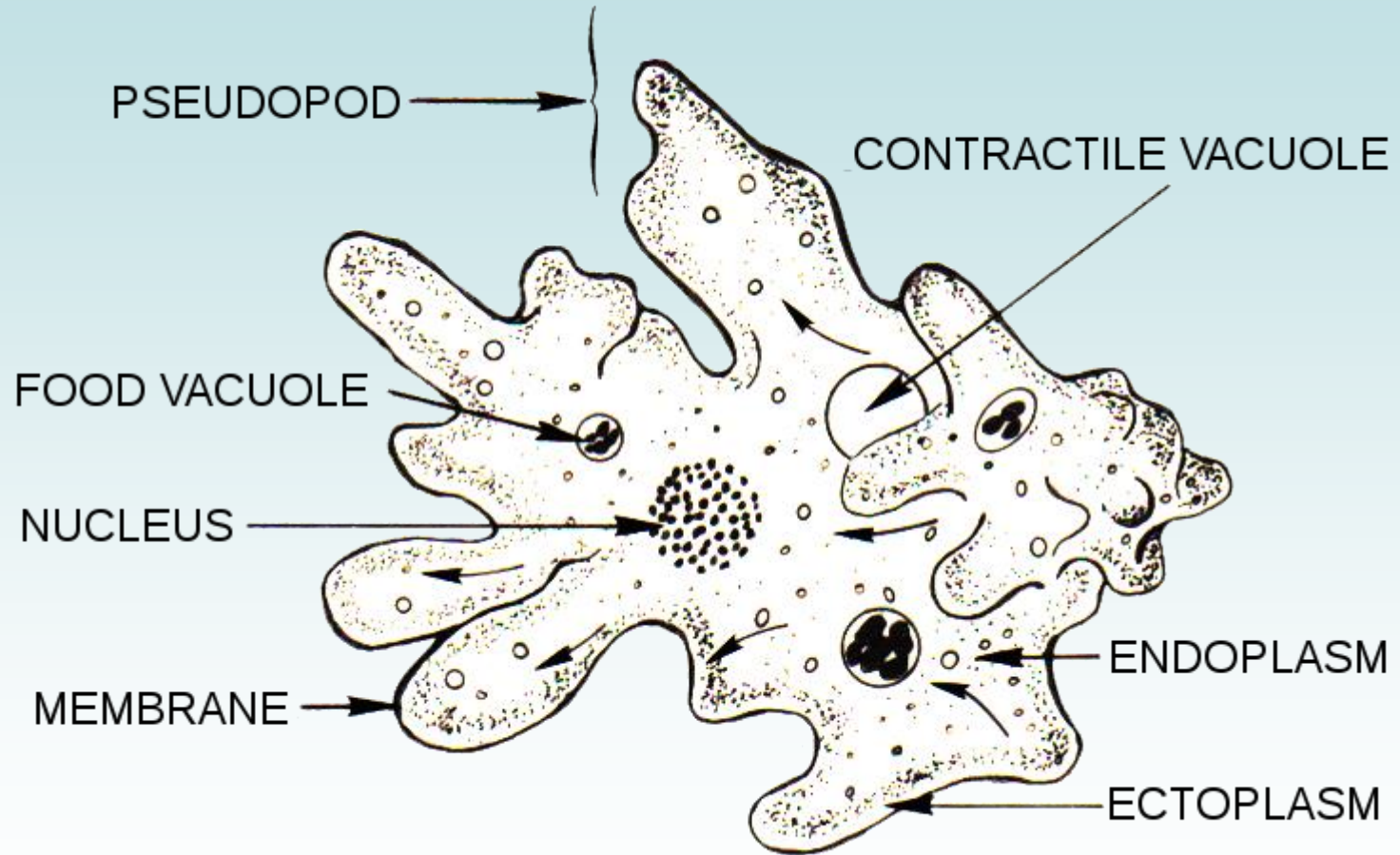
- Called “Protozoans” (before animals)
- Heterotrophs
- All are unicellular
- Categorized by how they move:
 - With Pseudopods
 - With Cilia (ciliates)
 - With Flagella (zooflagellates)
 - Others (Parasites)

Protists with Pseudopods

- Pseudopod = “fake foot”
- Move by extending their pseudopods and pulling the rest of their bodies forward
- Pseudopods also used to trap food
- Example: Amoeba



Amoeba Diagram

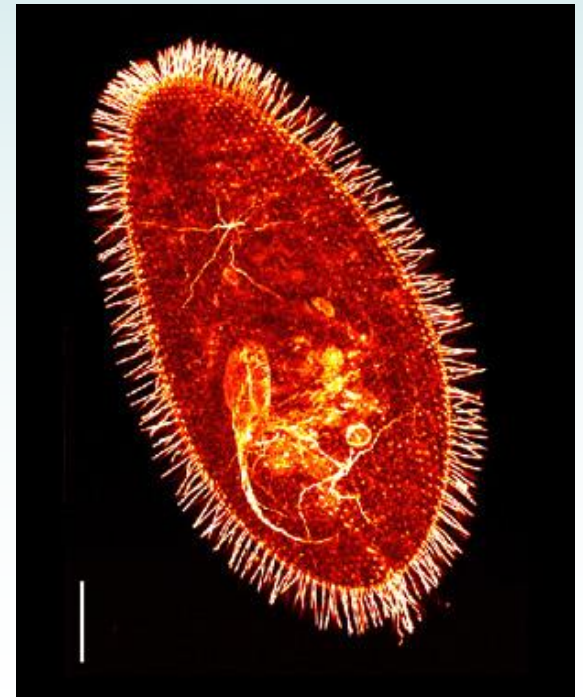


Protist Mini Quiz #3

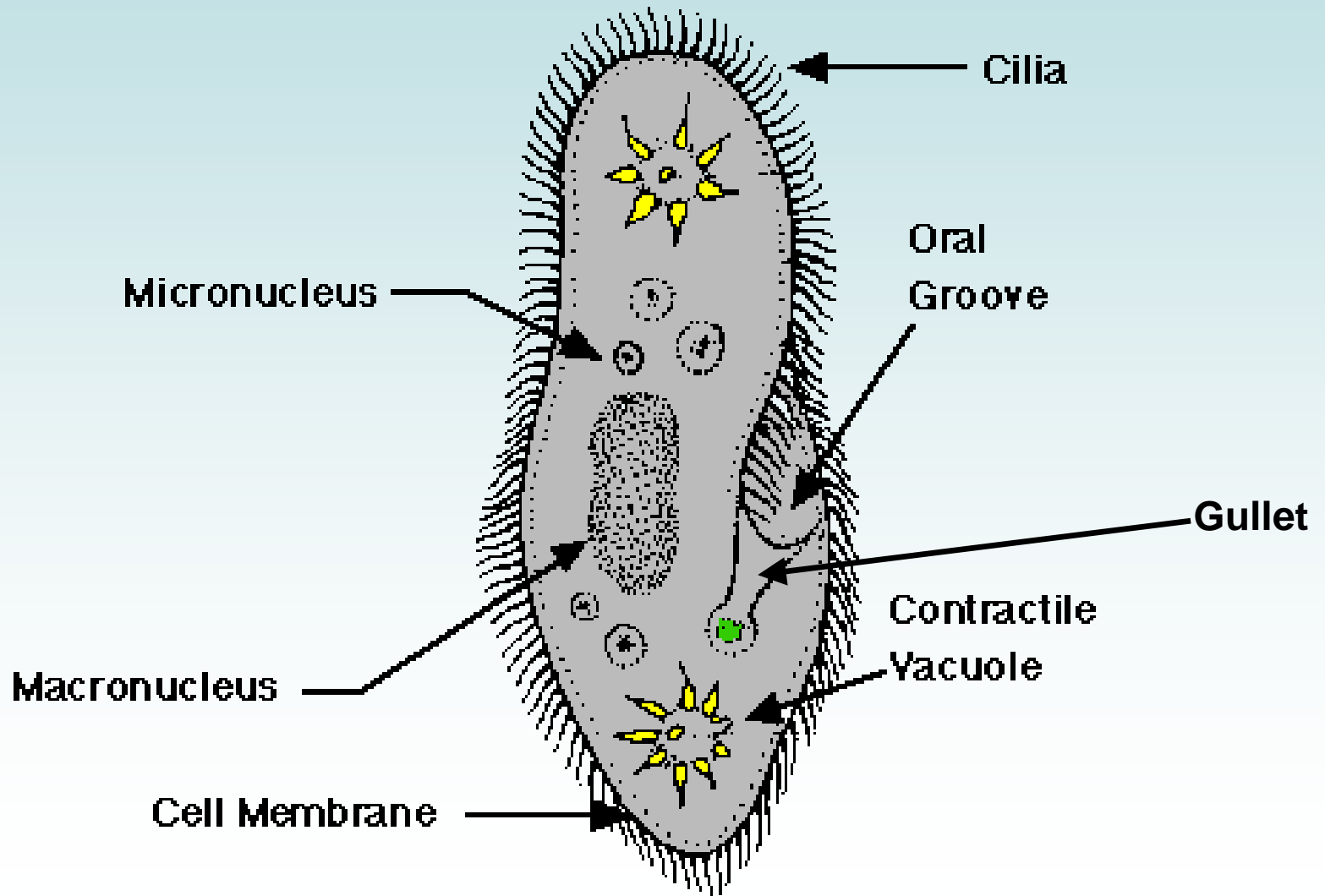
1. What are the three groups of protists?
2. Name two of the four types of green protists
3. What does “protozoan” mean?
4. How are animal-like protists classified?
5. List one thing that a pseudopod is used for.

Protists with Cilia

- Cilia - tiny hair-like structures
- Move by beating tiny cilia that act like oars
- Cilia also help capture food
- Example: paramecium

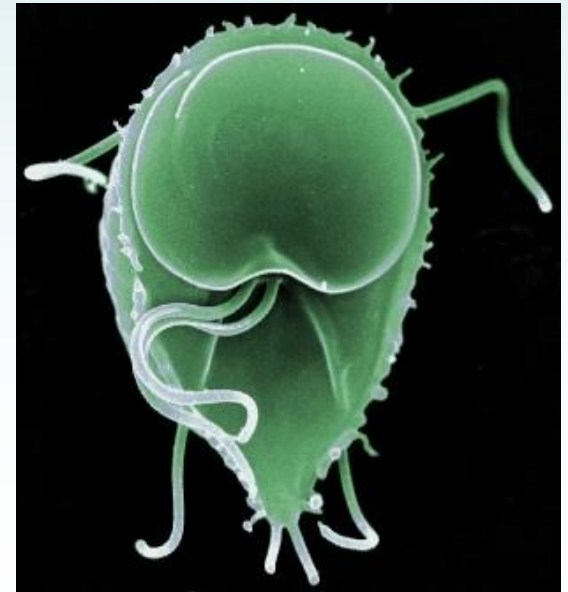


Paramecium Diagram



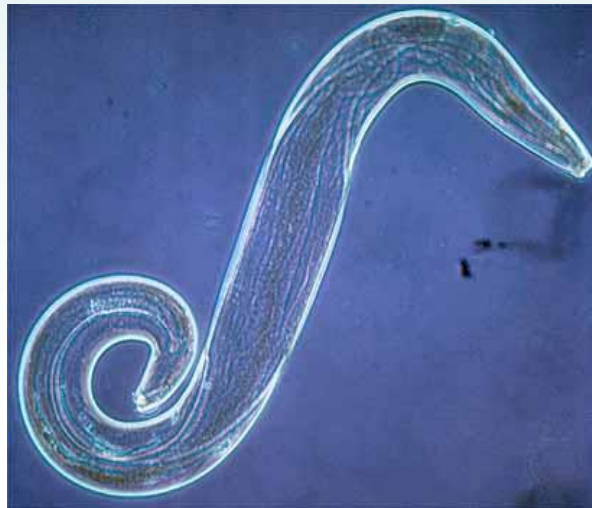
Protists with Flagella

- Flagella - whip-like tail
- Move by beating their long flagella
- Can have one or more flagella
- Most flagellates live in a host; can be helpful or harmful
- Example: Giardia



Other Animal-like Protists

- Characterized by the way they live... parasites!
- Most cause diseases
- Example: Plasmodium Vivax (causes malaria)



Fungus-Like Protists

- Heterotrophs
- Have cell walls (like a plant cell)
- Reproduce by forming spores (like fungus)
- Able to move at some point in their life
- Examples:
 - Water Molds
 - Slime Molds



Water Molds

- Live in water or moist environments
- Look like tiny threads with a fuzzy covering
- Attack food: potatoes, cabbage, corn
- Responsible for Irish Potato Famine

Slime Molds



- Live in moist soil and on decaying plants and trees
- Very colorful
- Move by forming pseudopods
- Feed on bacteria and other microorganisms (tiny living things)