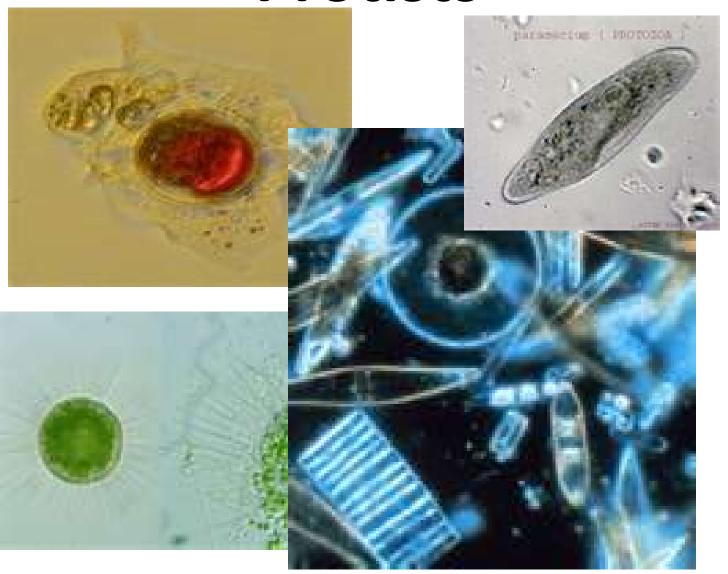
# **Protists**

Mr. Skirbst

# **Protists**



### **Protists**

Unicellular (single-celled) organisms with a nucleus

### 1. Animal-like

- 1. Animal-like
- 2. Plant-like

- 1. Animal-like
- 2. Plant-like
- 3. Fungus-like

Also called "protozoa"

```
Also called "protozoa" ("first" "animal")
```

Characteristics:

1. Cells have nucleus

- 1. Cells have nucleus
- 2. No cell wall

- 1. Cells have nucleus
- 2. No cell wall
- 3. Most can move

- 1. Cells have nucleus
- 2. No cell wall
- 3. Most can move
- 4. Heterotrophs

- 1. Cells have nucleus
- 2. No cell wall
- 3. Most can move
- 4. Heterotrophs (can't make own food)

#### 1. Sarcodines

- 1. Sarcodines
- 2. Ciliates

- 1. Sarcodines
- 2. Ciliates
- 3. Zooflagellates

- 1. Sarcodines
- 2. Ciliates
- 3. Zooflagellates
- 4. Sporozoans

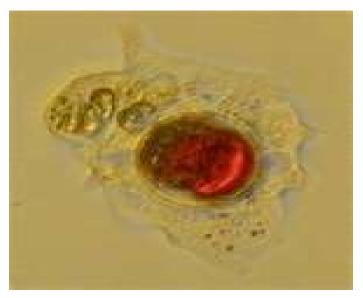
- Have a pseudopod

- Have a pseudopod (false foot)

- Have a pseudopod (false foot)
- Use it to move and hunt

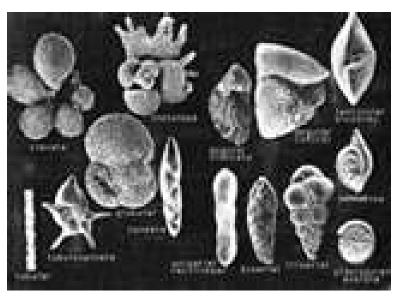
- Have a pseudopod (false foot)
- Use it to move and hunt

# Examples: ameba (bloblike)



- Have a pseudopod (false foot)
- Use it to move and hunt

Examples: foraminiferans (shell)



#### Ciliates

- Have cilia (hair-like structures)

#### Ciliates

- Have cilia (hair-like structures)
- Use cilia to move (like oars)

#### **Ciliates**

- Have cilia (hair-like structures)
- Use cilia to move (like oars)

**Example: paramecium** 



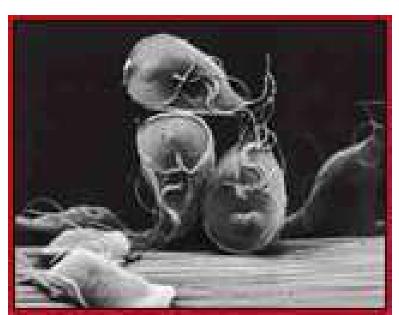
# Zooflagellates

- Have flagella (whip-like structure)

# Zooflagellates

- Have flagella (whip-like structure)
- Use flagella to move

**Example:** giardia



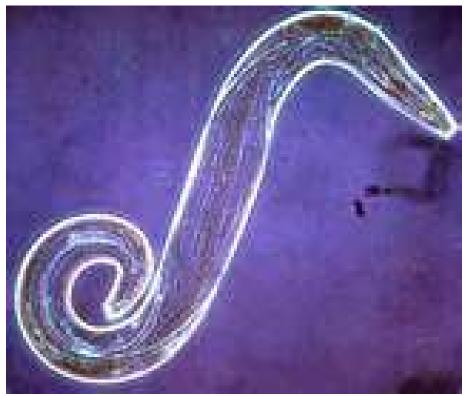
### Sporozoans

- Are parasites (require host)

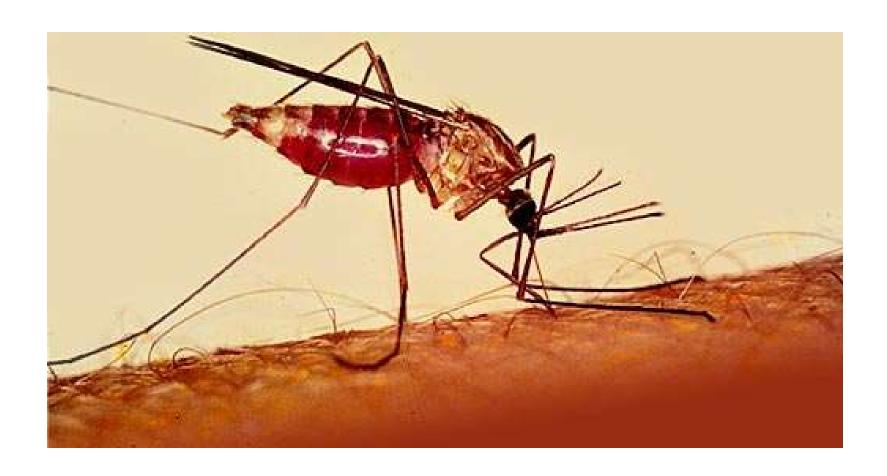
### Sporozoans

- Are parasites (require host)

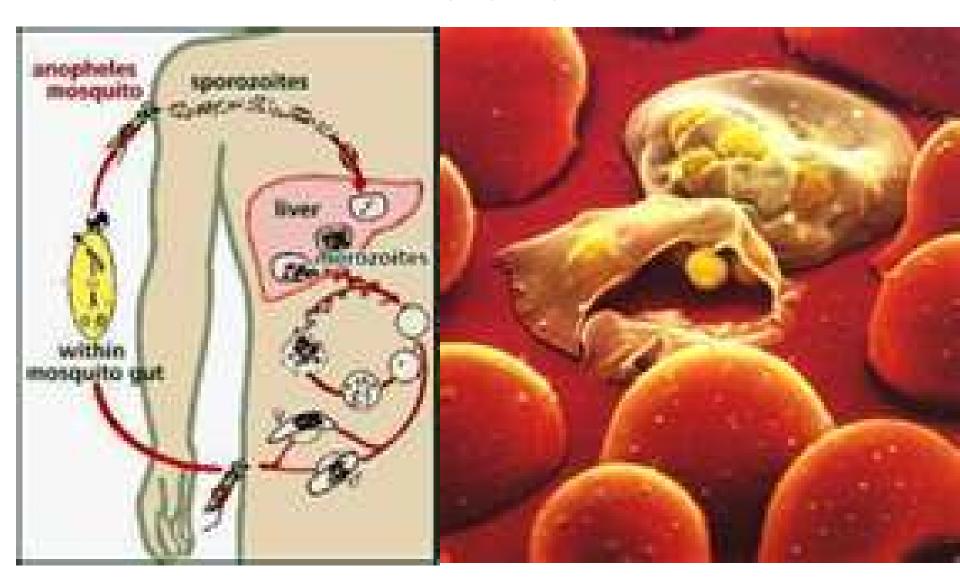
Example: plasmodium(malaria)



# Malaria



### Malaria



### **Plant-like Protists**

#### **Plant-like Protists**

- All are autotrophs

#### **Plant-like Protists**

- All are autotrophs
- They make their food from sunlight

#### 3 Groups of Plant-like Protists

#### 1. Euglena

### 3 Groups of Plant-like Protists

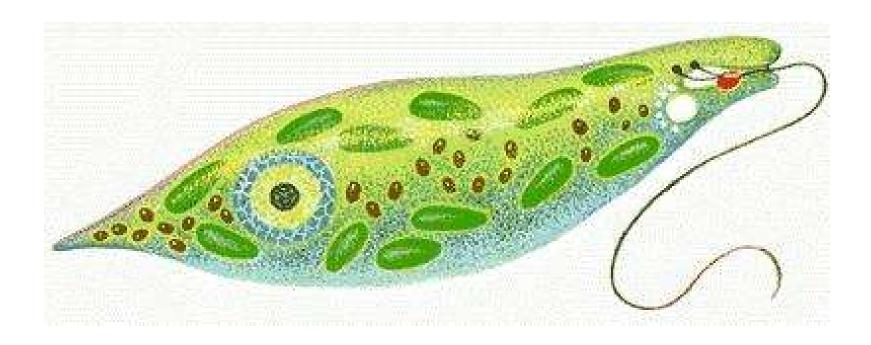
- Euglena
- 2. Diatoms

#### 3 Groups of Plant-like Protists

- Euglena
- 2. Diatoms
- 3. Dinoflagellates

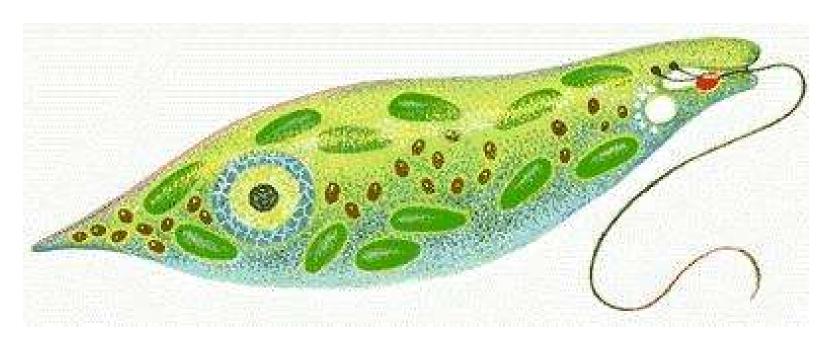
# Euglena

# - Have chloroplasts



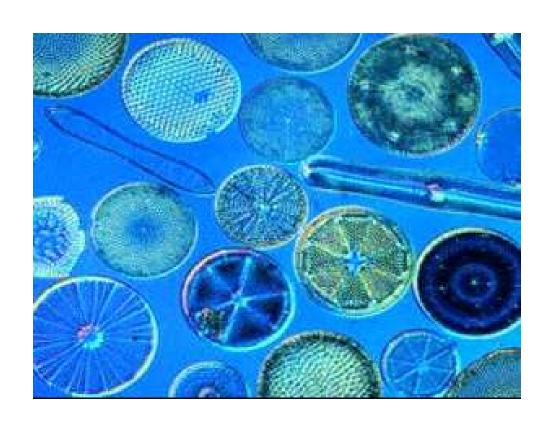
### Euglena

- Have chloroplasts
- Have eyespots (light sensitive)



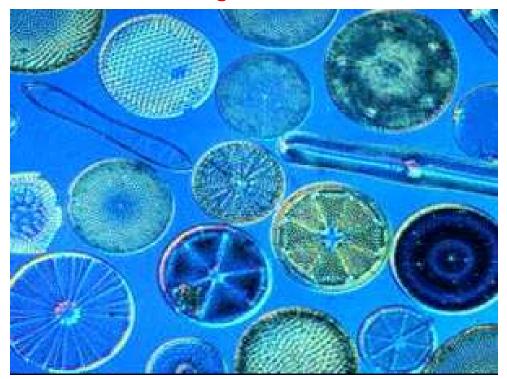
#### **Diatoms**

# - Have 2-part glassy shell



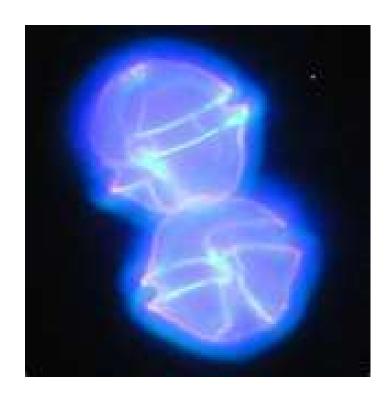
#### **Diatoms**

- Have 2-part glassy shell
- Used in toothpaste



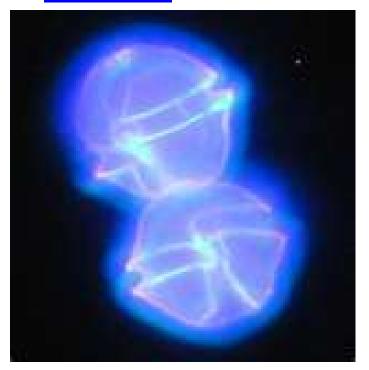
### Dinoflagellates

### - Have 2 flagella



#### Dinoflagellates

- Have 2 flagella
- Some can glow



## **Fungus-like Protists**

- Heterotroph with cell walls

#### **Fungus-like Protists**

- Heterotroph with cell walls
- Reproduce with spores

#### **Fungus-like Protists**

- Heterotroph with cell walls
- Reproduce with spores
- Can move at some point in life

### 3 Groups of Fungus-like Protists

#### 1. Water molds



### 3 Groups of Fungus-like Protists

- 1. Water molds
- 2. Downy mildews





### 3 Groups of Fungus-like Protists

- 1. Water molds
- 2. Downy mildews



#### 3. Slime molds



