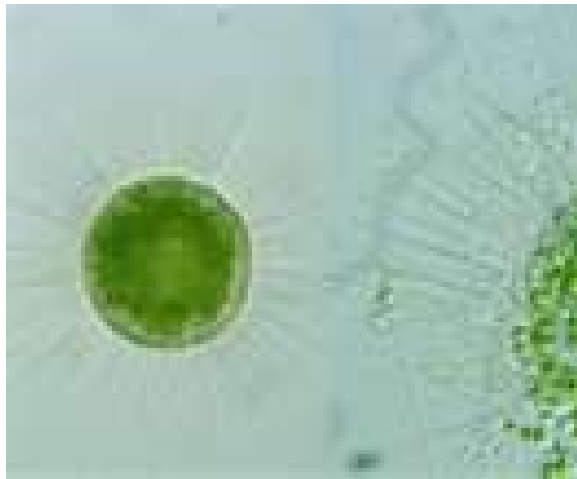
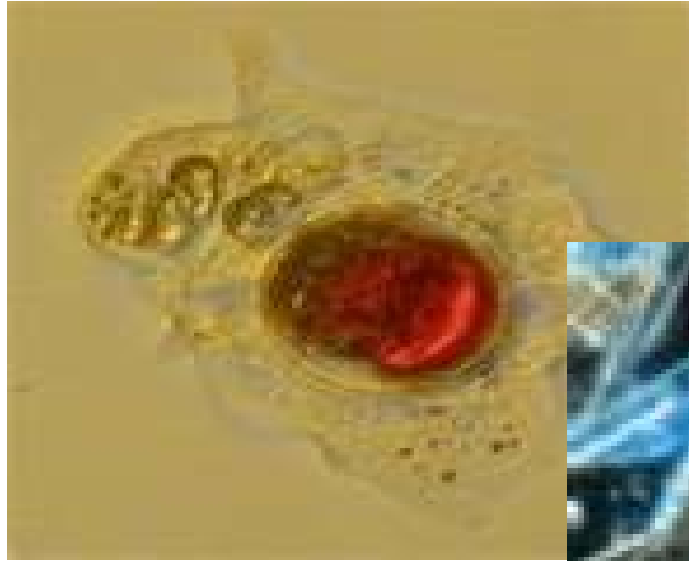


# Protists

Mr. Skirbst

# Protists



# Protists

**Unicellular (single-celled)  
organisms with a nucleus**

# 3 Types of Protists

# 3 Types of Protists

## 1. Animal-like

# 3 Types of Protists

1. Animal-like

**2. Plant-like**

# 3 Types of Protists

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

# Animal-like Protists

Also called "protozoa"



# Animal-like Protists

Also called “protozoa”

**(“first” “animal”)**

# **Animal-like Protists**

Characteristics:

# Animal-like Protists

Characteristics:

- 1. Cells have nucleus**

# Animal-like Protists

Characteristics:

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

# Animal-like Protists

Characteristics:

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

# Animal-like Protists

Characteristics:

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

# Animal-like Protists

Characteristics:

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

# **4 Groups of Animal-like Protists**



# 4 Groups of Animal-like Protists

## 1. Sarcodines

# 4 Groups of Animal-like Protists

1. Sarcodines

**2. Ciliates**

# 4 Groups of Animal-like Protists

1. Sarcodines

2. Ciliates

**3. Zooflagellates**

# 4 Groups of Animal-like Protists

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

# Sarcodines

- Have a pseudopod

# Sarcodines

- Have a pseudopod **(false foot)**

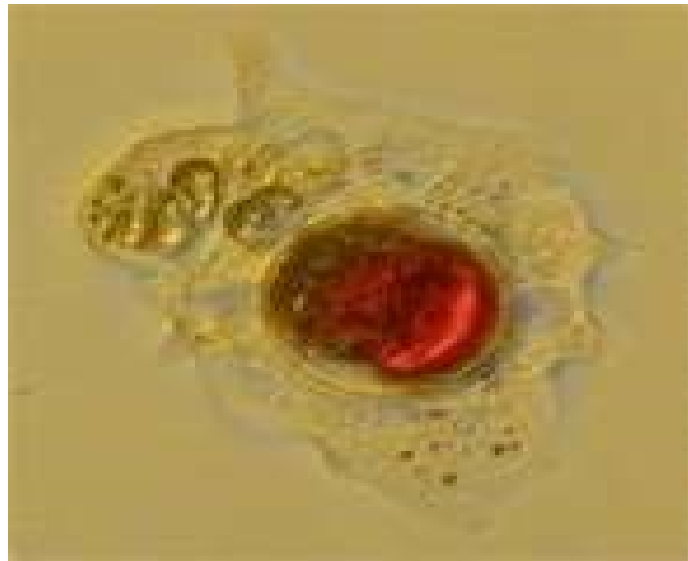
# Sarcodines

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

# Sarcodines

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

**Examples: ameba (bloblike)**

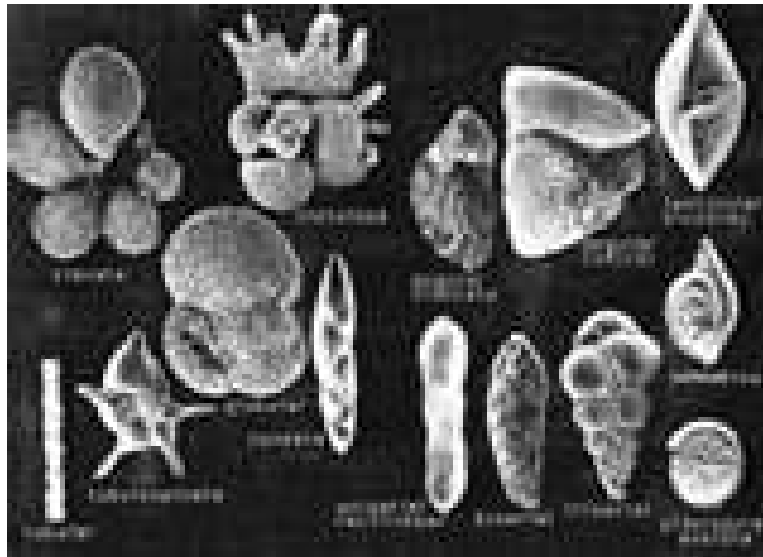




# Sarcodines

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

Examples: **foraminiferans (shell)**



# Ciliates

- Have cilia (hair-like structures)

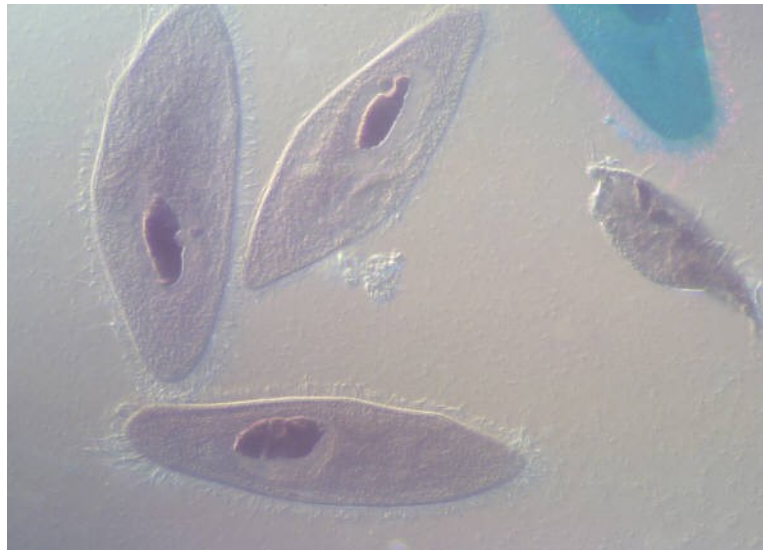
# Ciliates

- 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**



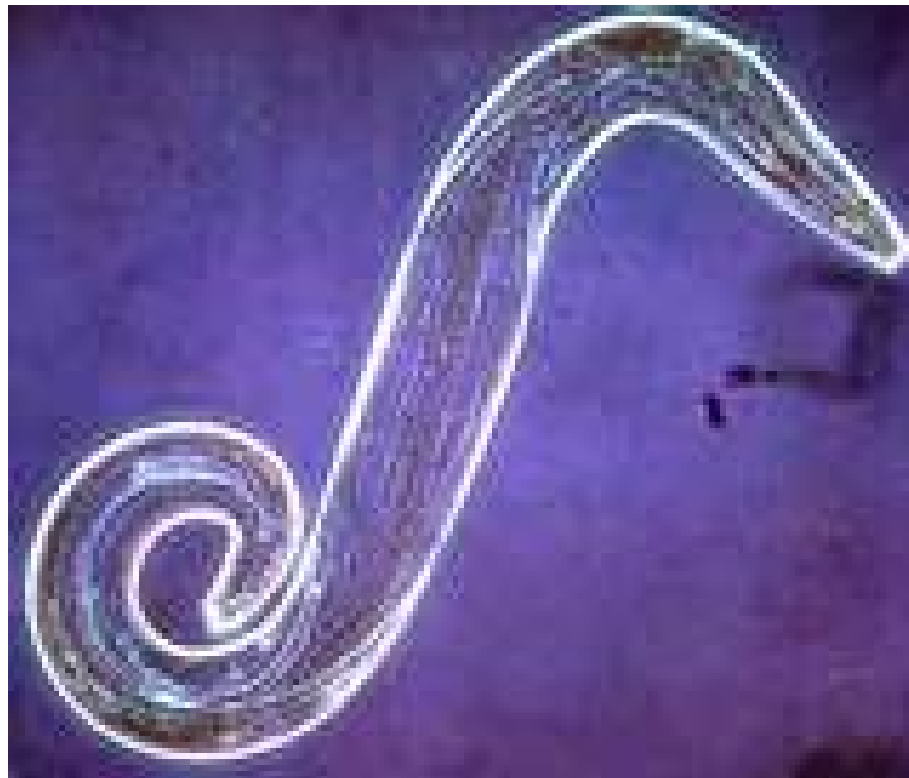
# **Sporozoans**

- **Are parasites (require host)**

# Sporozoans

- Are parasites (require host)

**Example: plasmodium(malaria)**

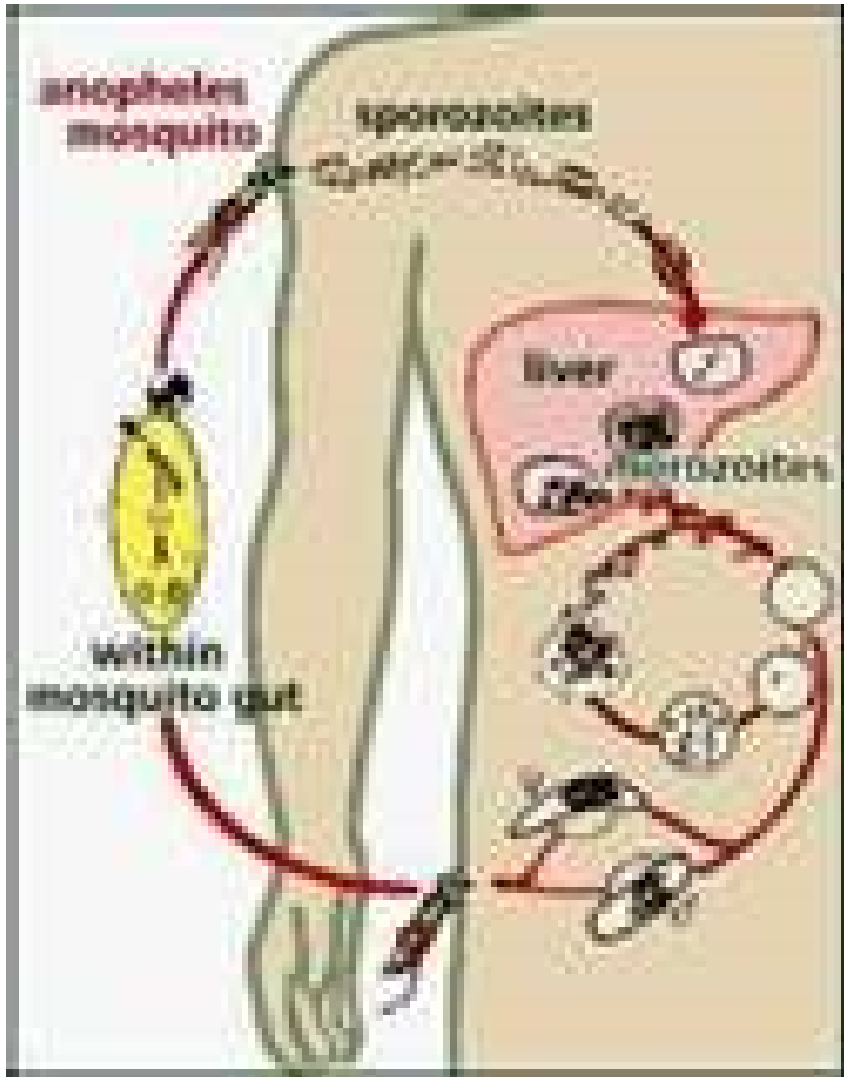




# Malaria



# Malaria



# Plant-like Protists

# Plant-like Protists

- All are autotrophs

# Plant-like Protists

- All are autotrophs
- **They make their food from sunlight**

# Plant-like Protists

## 1. Euglena

# Plant-like Protists

1. Euglena
- 2. Diatoms**

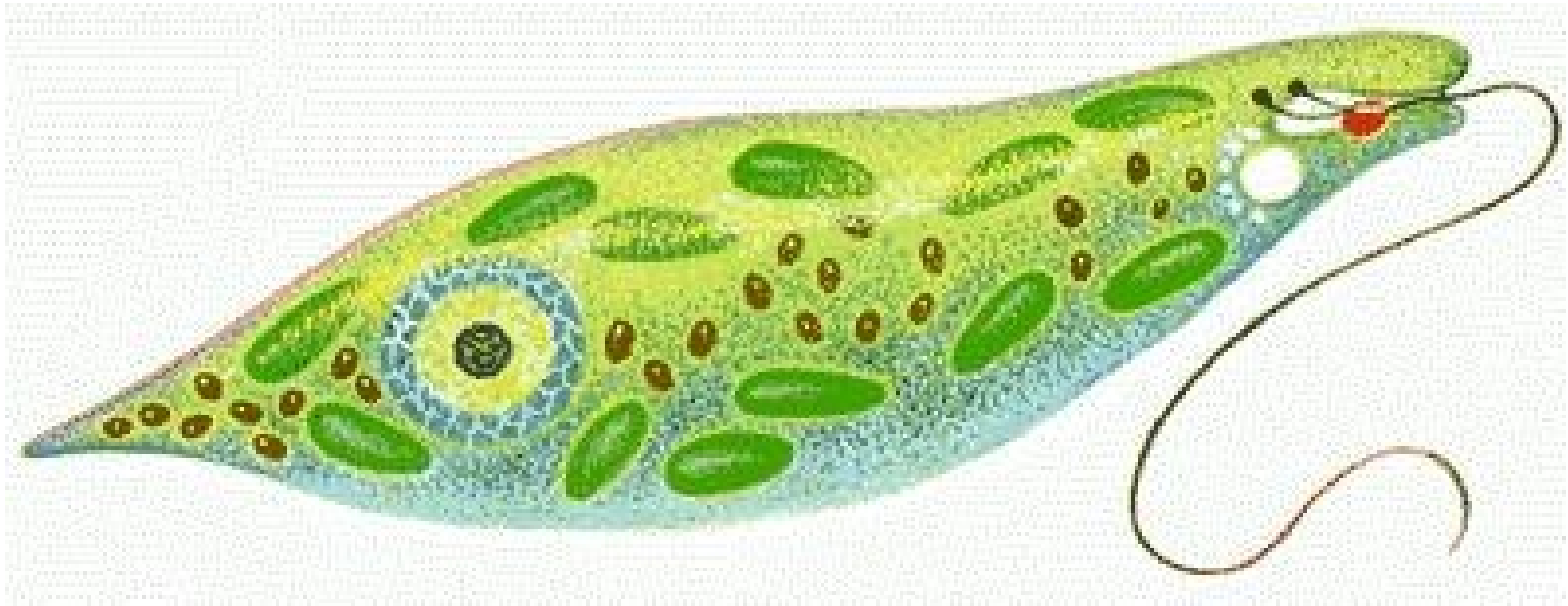
# Plant-like Protists

1. Euglena
2. Diatoms
- 3. Dinoflagellates**



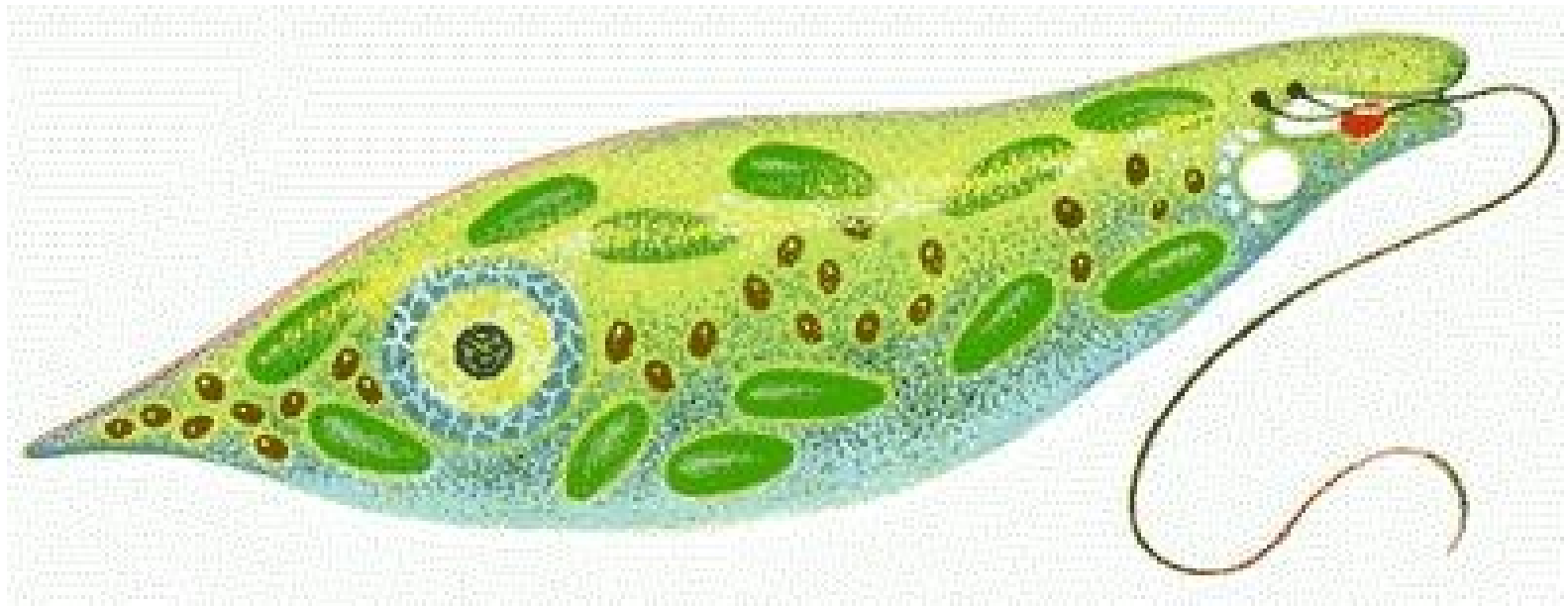
# Euglena

- Have chloroplasts



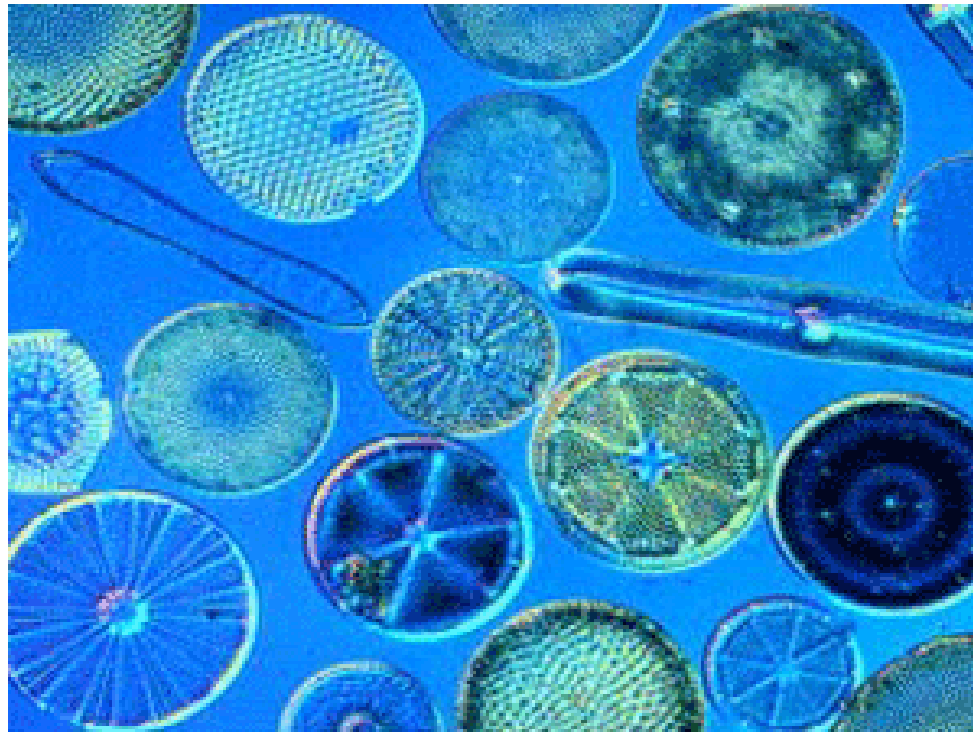
# Euglena

- Have chloroplasts
- **Have eyespots (light sensitive)**



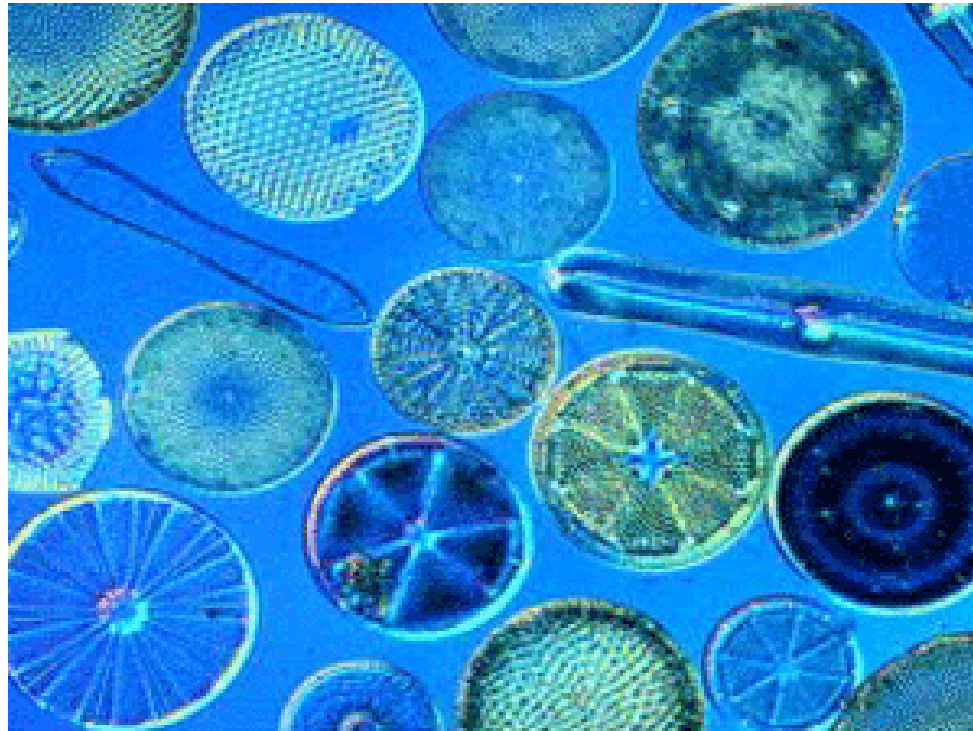
# Diatoms

- Have 2-part glassy shell



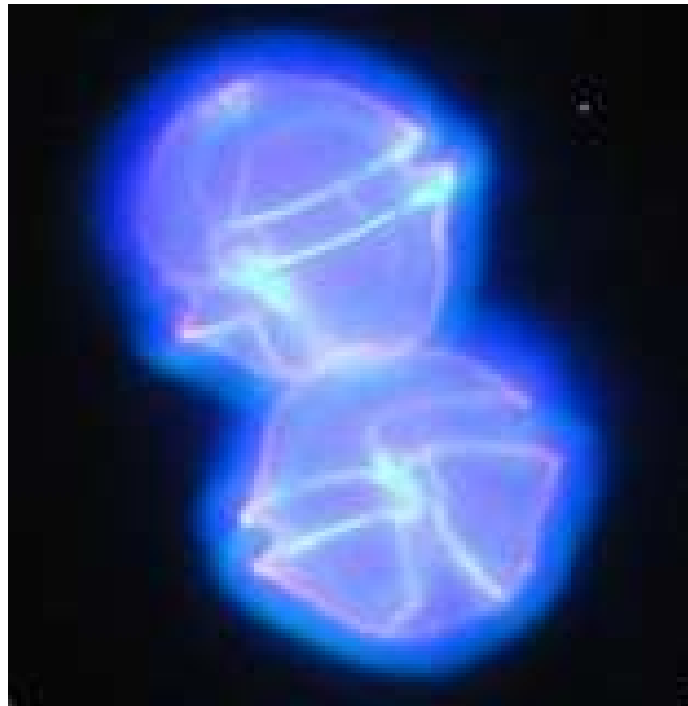
# Diatoms

- Have 2-part glassy shell
- **Used in toothpaste**



# Dinoflagellates

- Have 2 flagella



# Dinoflagellates

- Have 2 flagella
- **Some can glow**



# Funguslike Protists

- **Heterotroph with cell walls**

# Funguslike Protists

- Heterotroph with cell walls
- **Reproduce with spores**



# Funguslike Protists

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

# 3 Types of Funguslike Protists

## 1. Water molds



# 3 Types of Funguslike Protists

1. Water molds

2. Downy mildews



# 3 Types of Funguslike Protists

1. Water molds
2. Downy mildews
- 3. Slime molds**

