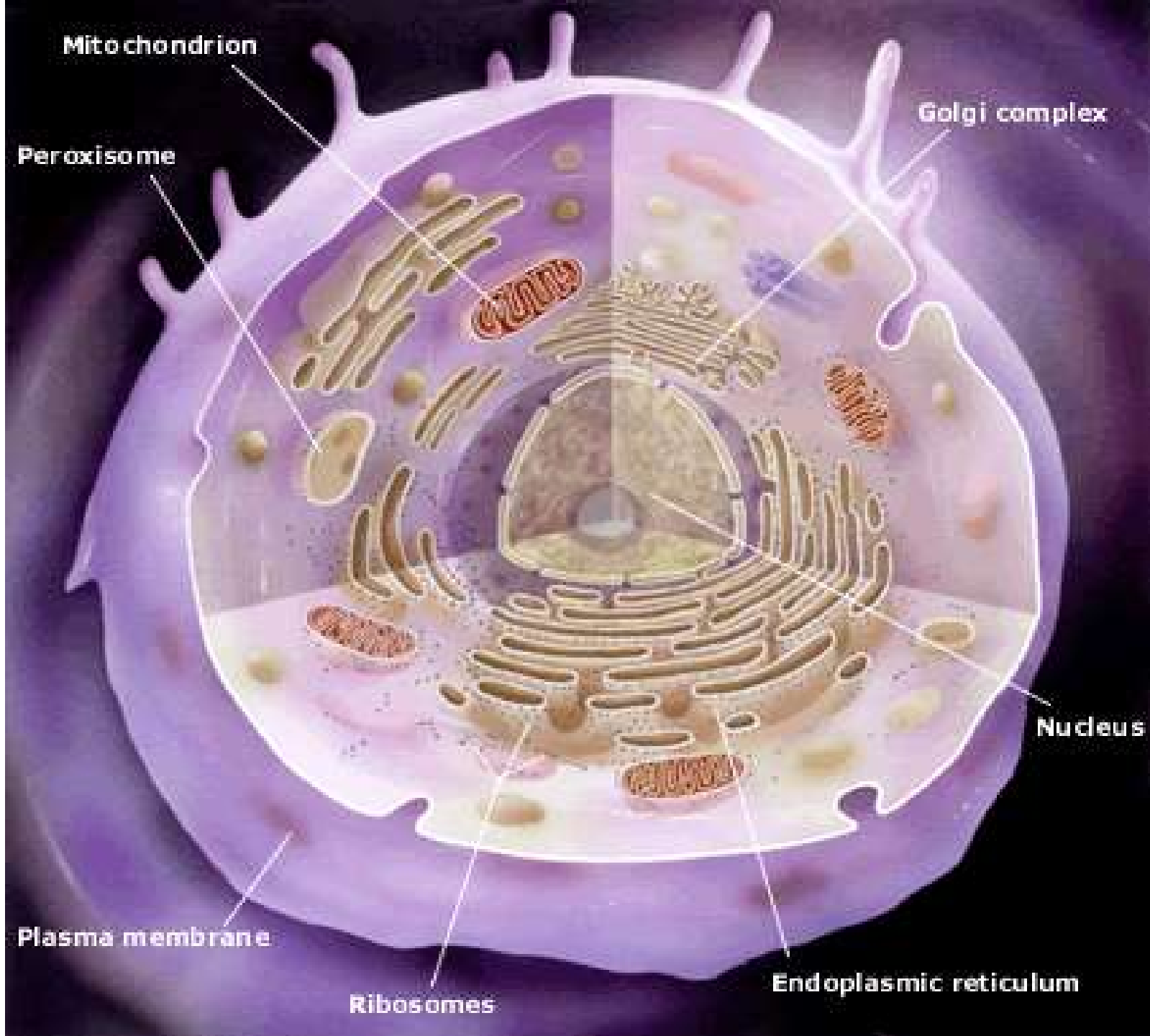
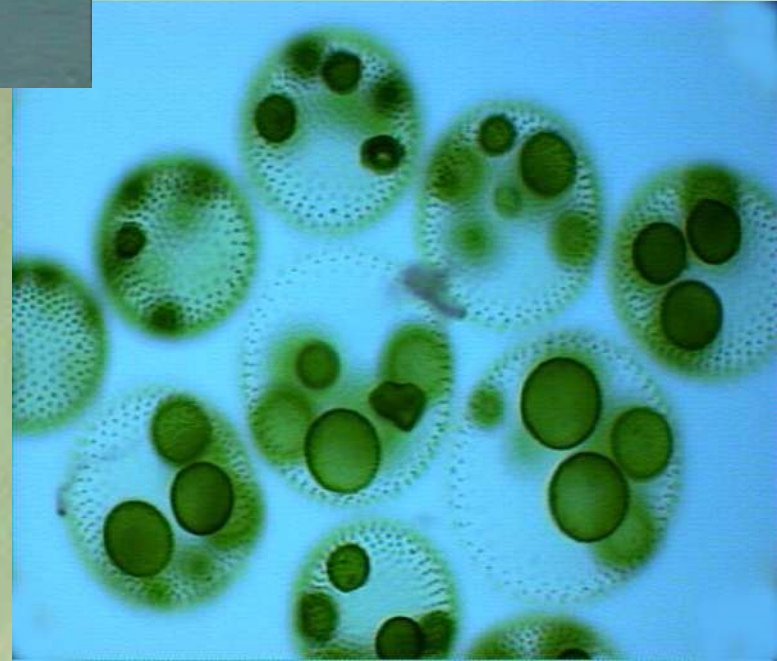
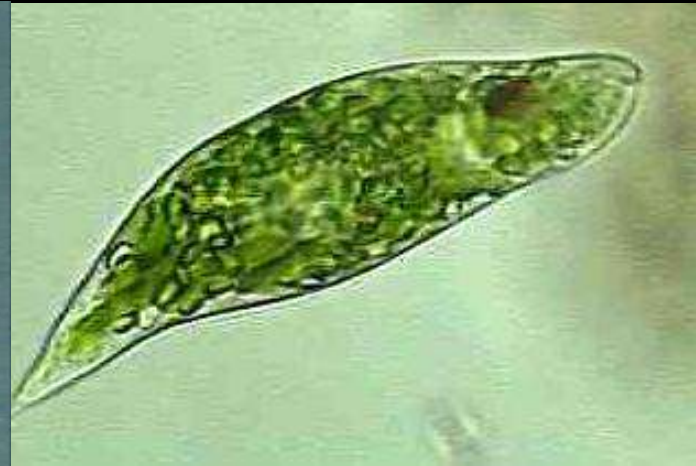
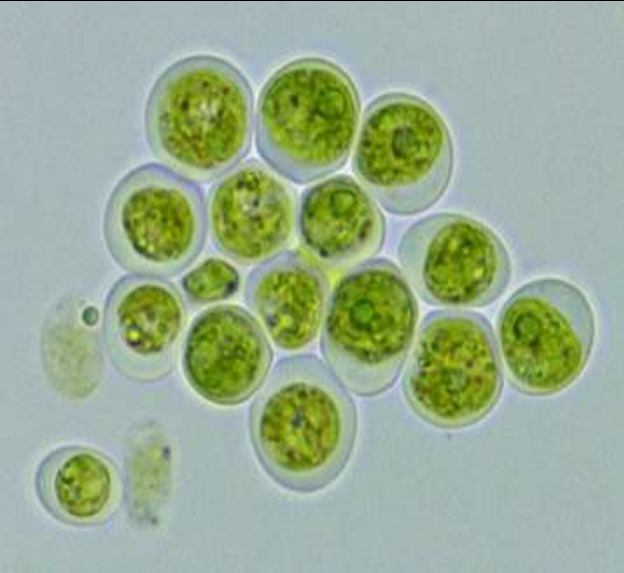


# Unicellular Organisms



# Unicellular Organisms

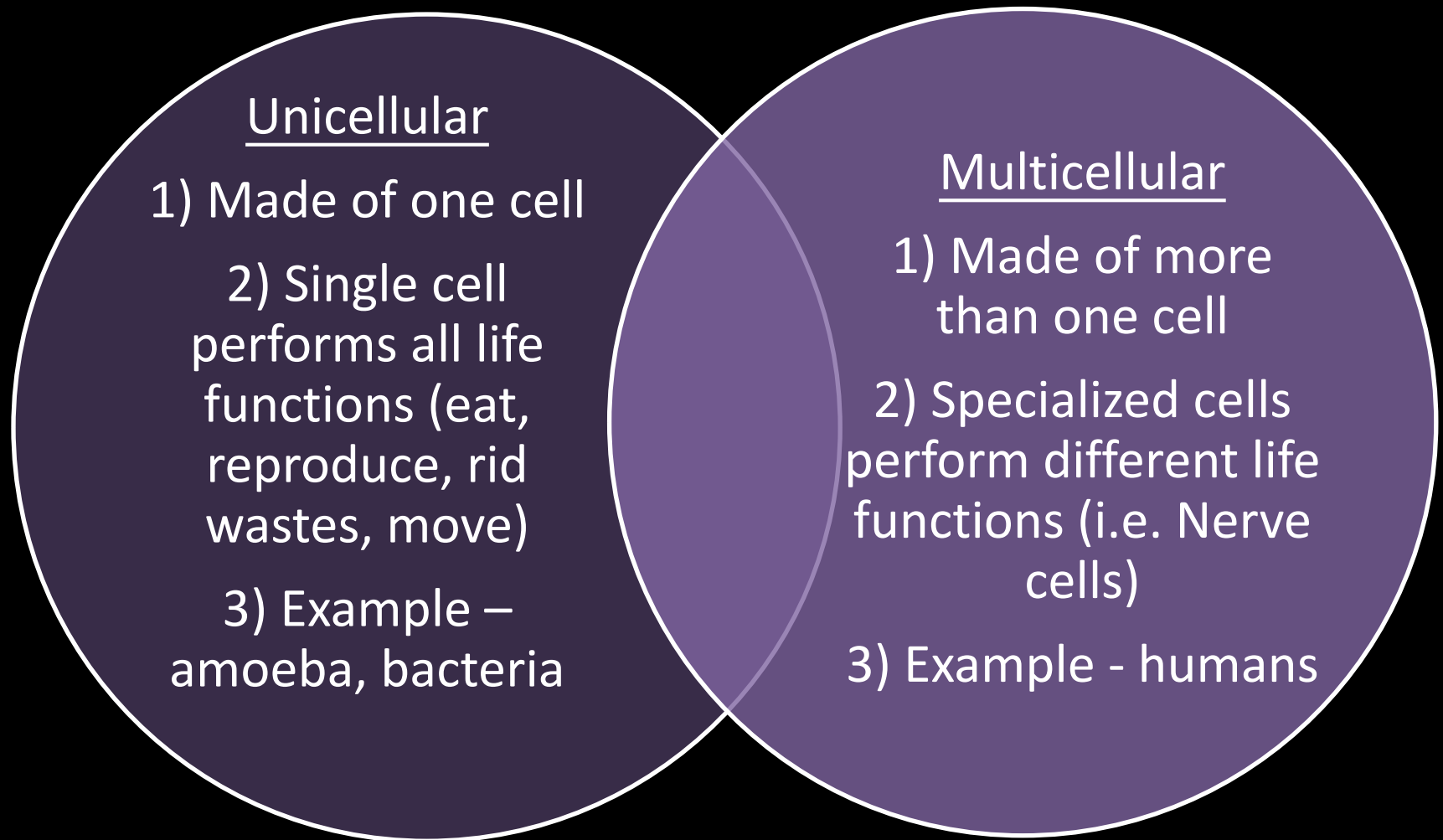
## Made of only one cell!!



# With a partner...brainstorm answers to the following questions

- 1) How do you think **unicellular organisms**...eat, move, get rid of wastes, and reproduce?
- 2) How do **multicellular organisms**...eat, move, get rid of wastes, reproduce?
- 3) How many different cell types are found in the human body? Name as many as you can.
- 4) What would be some of the benefits of being a multicellular organism?
- 5) Name 2 multicellular organisms and 2 unicellular organisms.

# Copy the Following Chart in Your Notes



# Examples of Unicellular Species - Amoeba

- **Feeding**
  - Eats tiny plants/bacteria
  - Temporary “arms” surround food and bring it into the cell vacuole
- **Movement**
  - Called “cytoplasmic streaming”
  - Cytoplasm moves in one direction and rest of cell follows
- **Reproduction**
  - One parent divides into two. This is called binary fission.
- **Removal of Wastes**
  - Wastes removed from cell by vacuoles

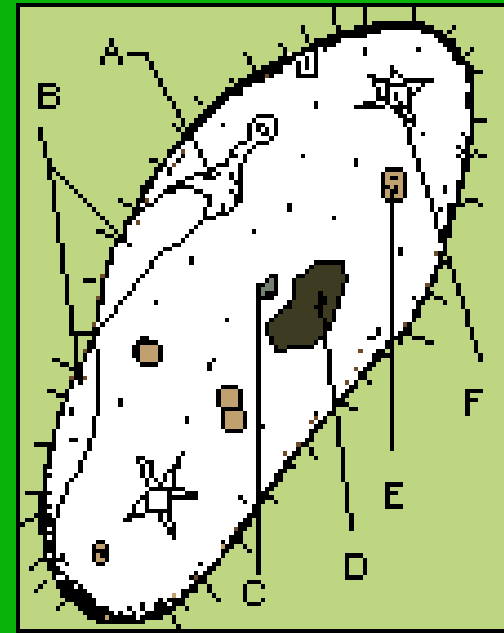
# Amoeba Feeds!

- Feeding:
  - <http://www.youtube.com/watch?v=W6rnhiMxtKU&feature=related>
- Movement:
  - [http://www.youtube.com/watch?v=7pR7TNzJ\\_pA](http://www.youtube.com/watch?v=7pR7TNzJ_pA)



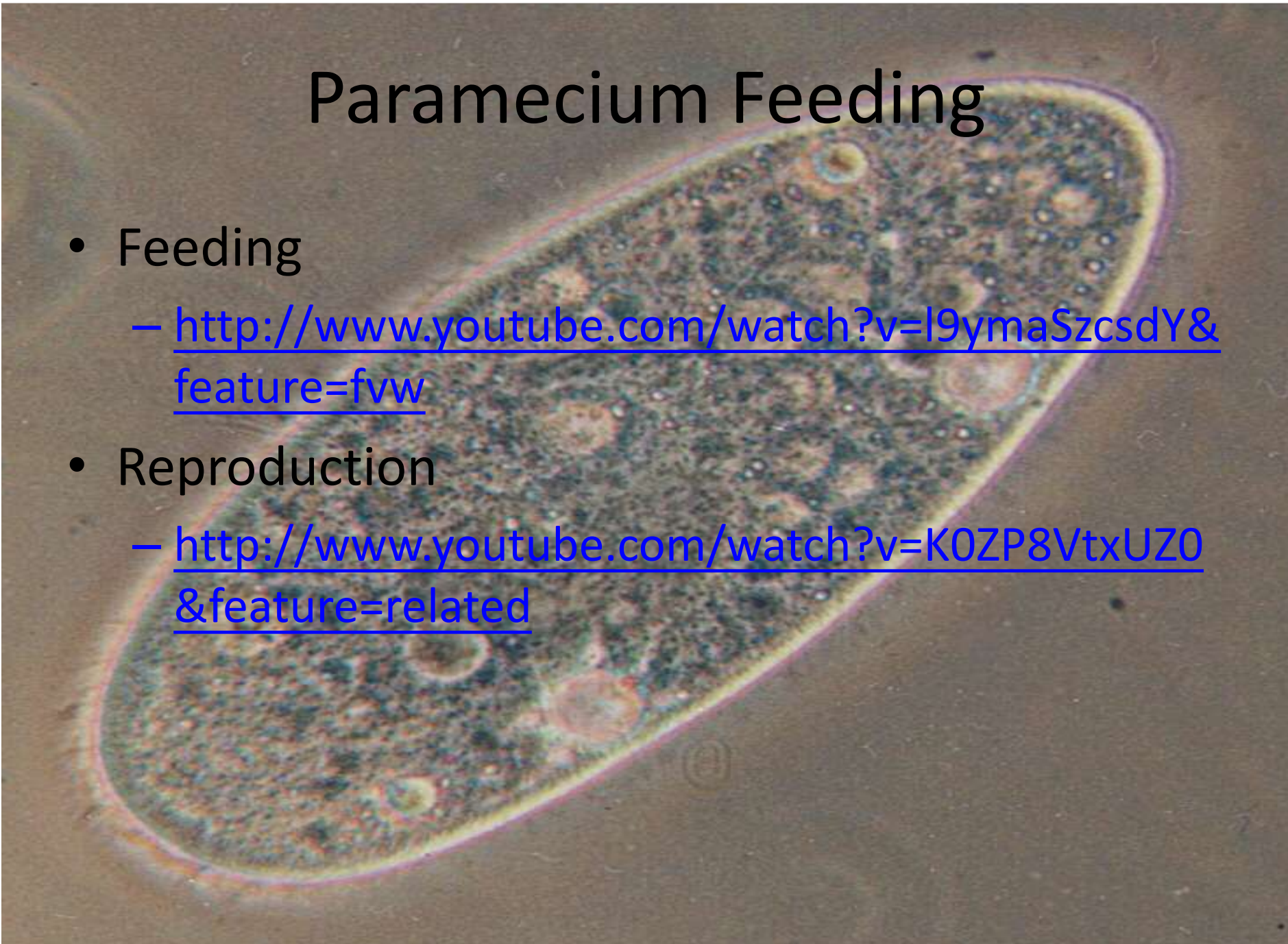
# Paramecium

- Feeding
  - Eats bacteria/smaller organisms
  - Has a structure called a “**gullet**”
  - Tiny hairs sweep food into this gullet
- Movement
  - Swims using tiny hairlike structures called **cilia**
- Reproduction
  - Divides into two by binary fission (can divide up to 2-3 times a day!!)
- Removal of Wastes
  - Vacuoles responsible for removing wastes



# Paramecium Feeding

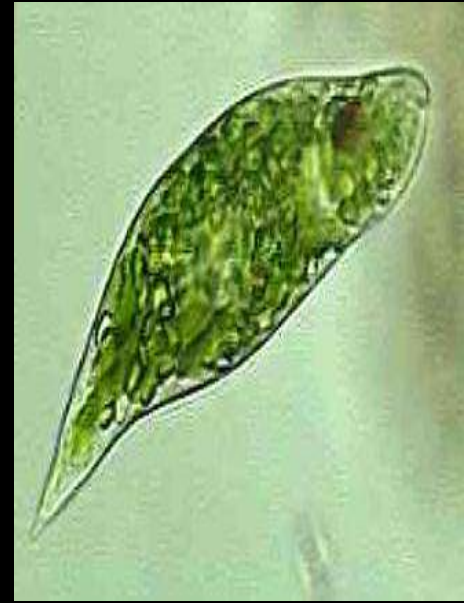
- Feeding
  - <http://www.youtube.com/watch?v=l9ymaSzcsdY&feature=fvw>
- Reproduction
  - <http://www.youtube.com/watch?v=K0ZP8VtxUZ0&feature=related>





# Euglena

- Feeding
  - Able to make its own food (like a plant)
  - In the dark, it can eat other species (like amoeba)
- Movement
  - Uses a whip-like structure called a “flagella” to move through water
- Reproduction
  - Splits into two by using binary fission
- Remove Wastes
  - The vacuole of the cell removes the wastes



# Euglena

A detailed microscopic image of a single Euglena cell. The cell is elongated and spindle-shaped with a pointed anterior end. It is filled with green chloroplasts and contains a large, dark, oval-shaped nucleus. A thin, transparent pellicle is visible along the cell's periphery.

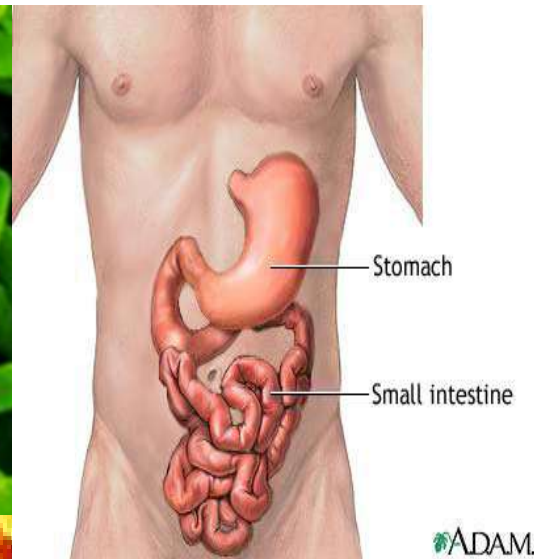
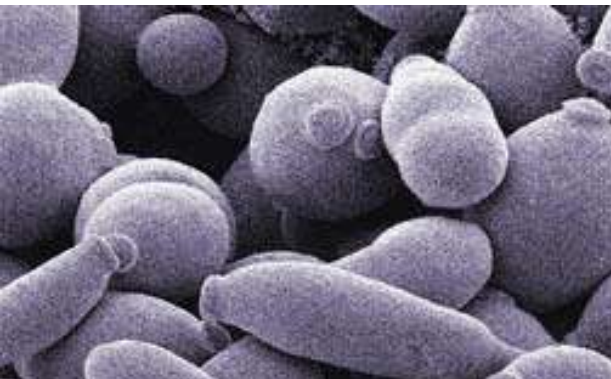
- **Reproduction - Binary Fission**

- <http://www.youtube.com/watch?v=5fg3Q-hbSsl>

- **Movement**

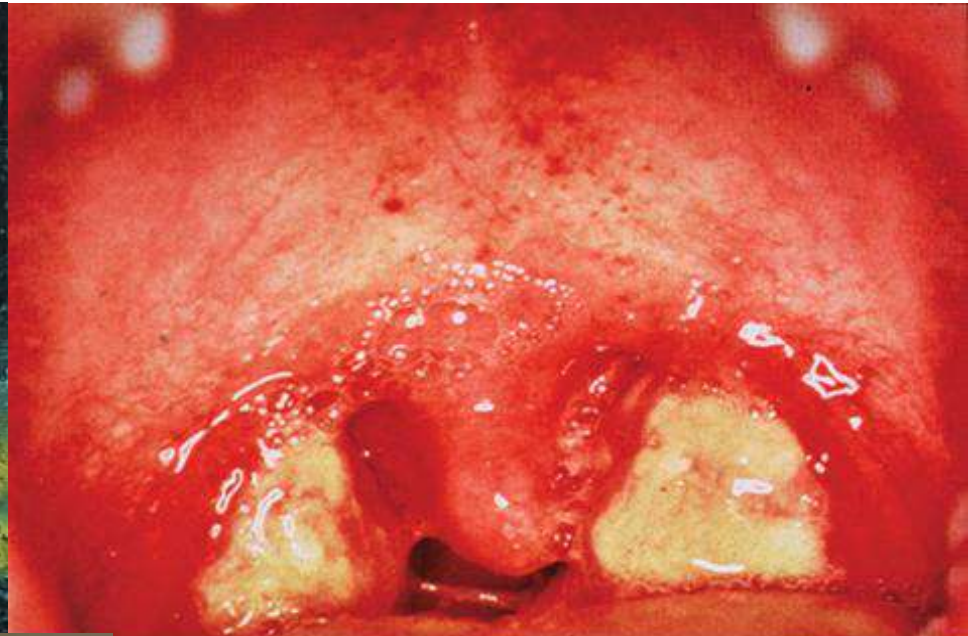
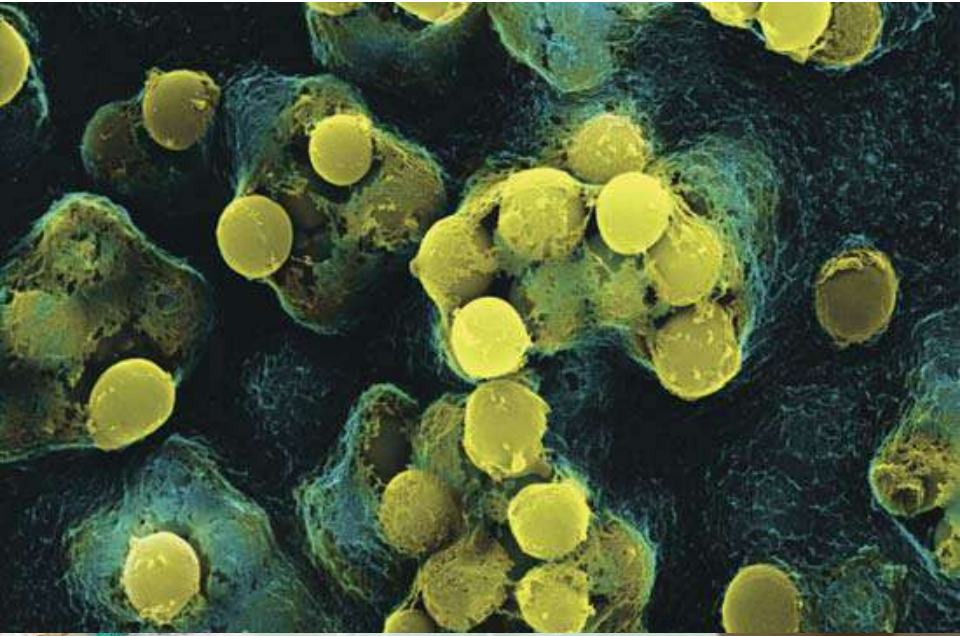
- <http://www.youtube.com/watch?v=fl7nEWUjk3A>

# Unicellular Organisms in Us!





# Unicellular Organisms in Us





# **YOUR QUESTIONS**

- What does unicellular mean?
- How big are unicellular organisms?
- What things do unicellular organisms contain?
- Do people have unicellular organisms?
  - What do unicellular organisms eat?
  - How do unicellular organisms move?
    - Do they mate?
- Do unicellular organisms have organelles?

# Resource

- Pond Water Critters Website
- <http://www.microscope-microscope.org/applications/pond-critters/pond-critters.htm>