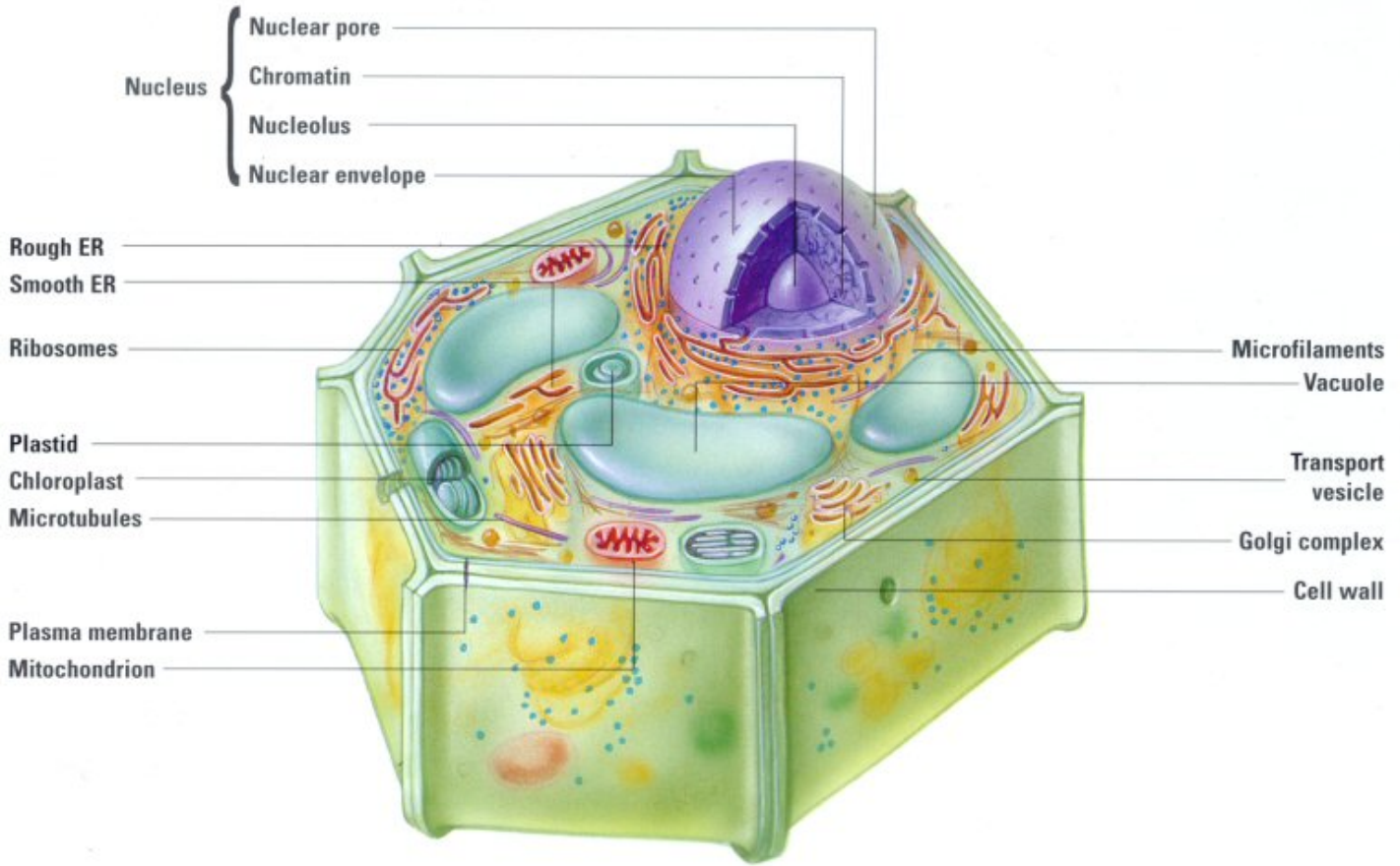
Plant vs. Animal Cells

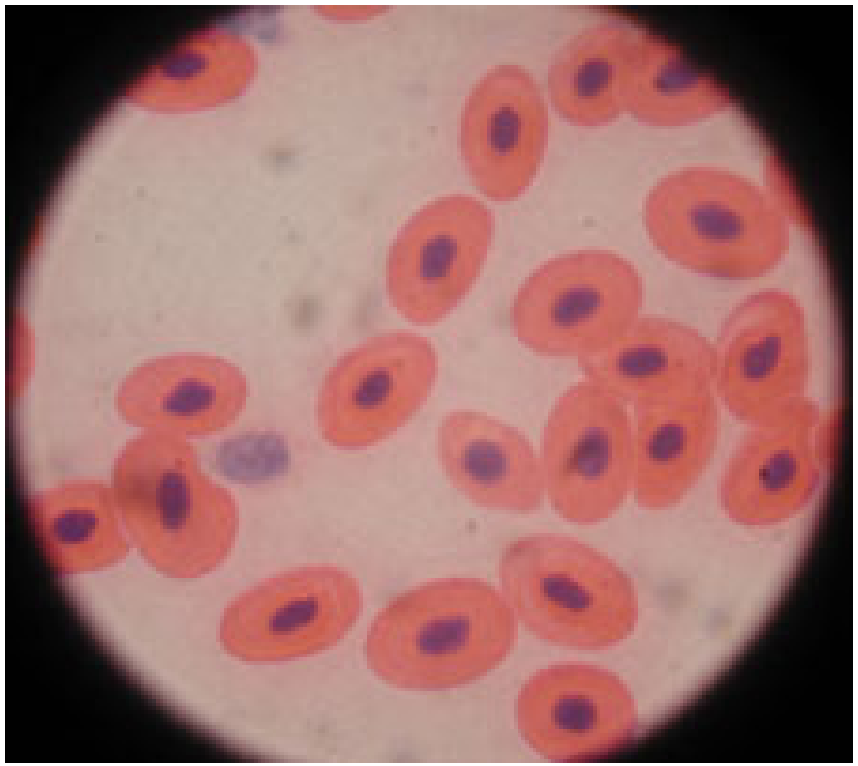


Getting Started

- You will need a piece of computer paper, a pencil, and colored pencils to complete this activity.
- Fold the sheet of computer paper into fourths. You will use a separate square for each drawing, front and back, so 8 total.
- Be sure to label organelles and note if they are plant or animal cells for each picture.

Frog Blood

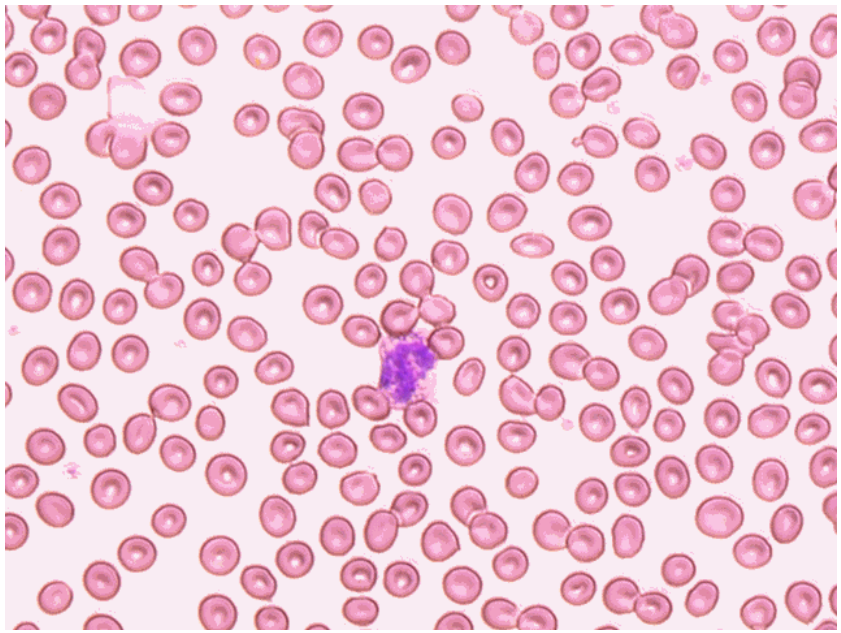
- Sketch and label the organelles visible onto your paper in the first block.
- Record the magnification. If the ocular lens on this microscope was 10X, calculate what must be the label on the objective lens.
- Indicate if these are plant or animal cells



Magnification 1000x

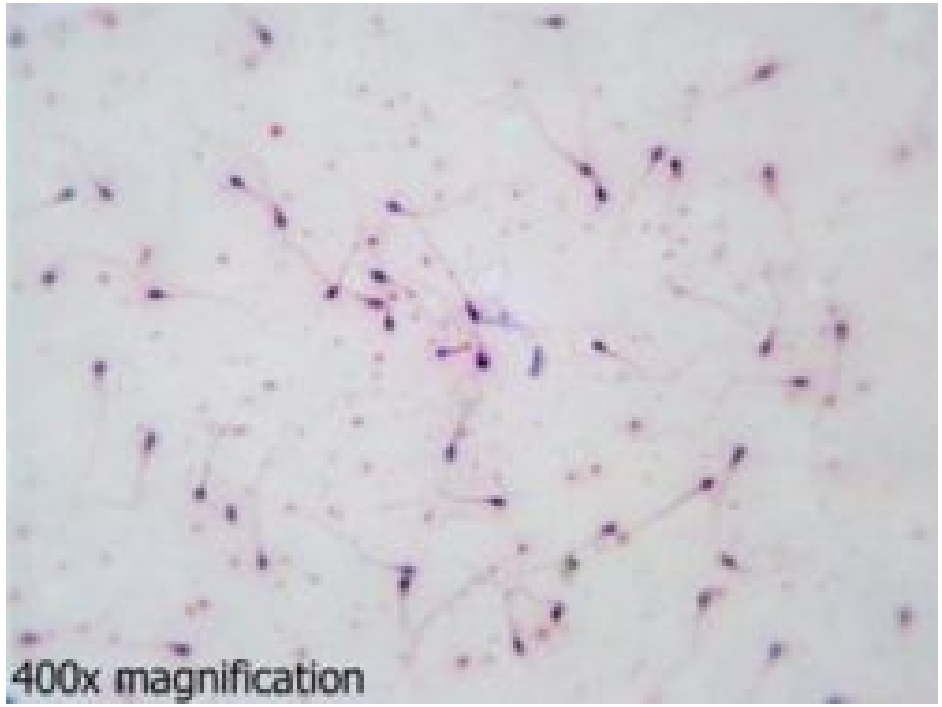
Human Blood

- Sketch and label the organelles visible in to the second block on your paper.
- Identify red and white blood cells in the photo (hint- the white blood cell is not white in this photo)
- Indicate if these are plant or animal cells



Human Sperm

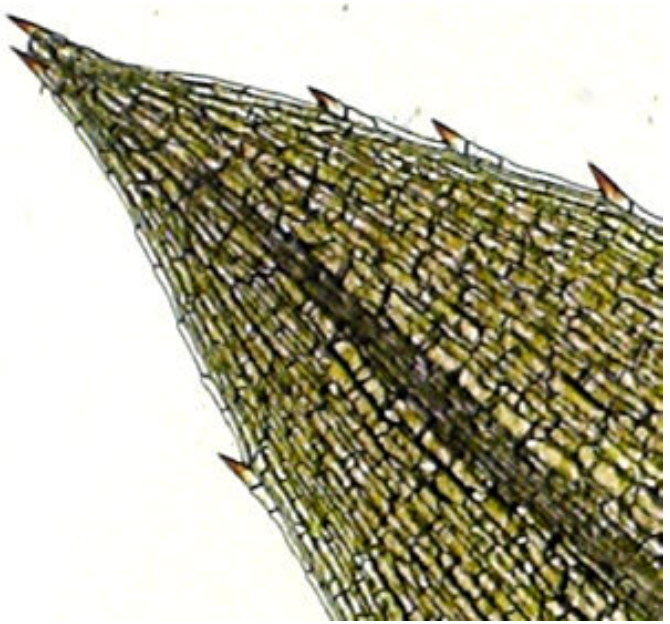
- Sketch and label the organelles visible in to the third block on your paper.
- Record the magnification.
- What is the name of the long projection from the body of the sperm cell?
- What is the function of this?
- Indicate if these are plant or animal cells



Onion stained with iodine

- Sketch and label the organelles visible in to the fourth block on your paper.
- Be sure to include the cell wall, cytoplasm, nuclear membrane, nucleus, and cell membrane.
- Indicate if the cell is plant or animal.

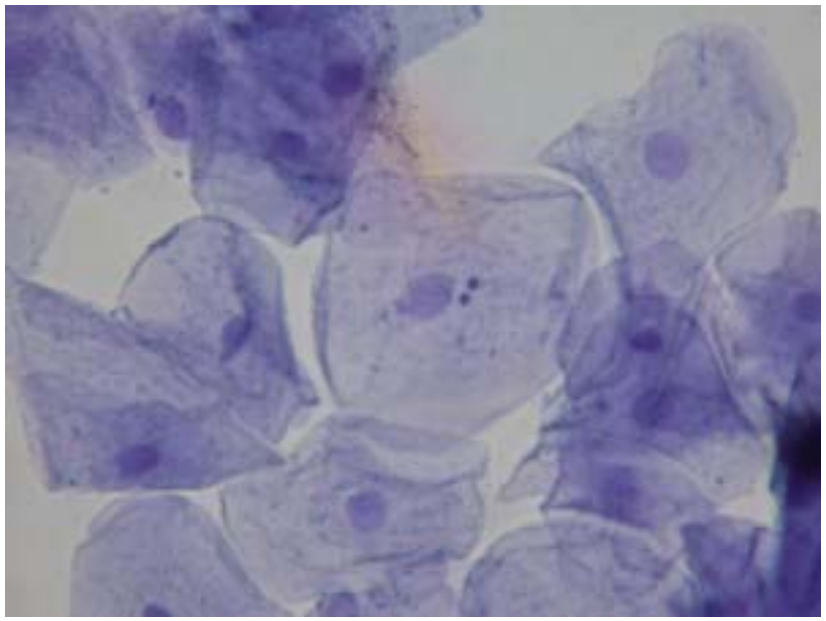
Elodea



- Notice the spike shaped cells towards the outer edge of the leaf. The purpose of these cells is to increase the surface area.
- Look at the image under higher magnification. Sketch and label all visible organelles.
- Be sure to include the cell wall, cytoplasm, nuclear membrane, nucleus, and cell membrane and chloroplasts.
- Indicate if the cell is plant or animal.

Epithelia cell stained with Methylene Blue

- Sketch and label the organelles visible in the next block on your paper.
- Be sure to include the cytoplasm, nucleus, and cell membrane.
- Indicate if the cell is plant or animal.



Red Onion- Osmosis

- Sketch and label the organelles of each of the microscope views to the left. Be sure to label the cell wall and cell membrane of each.
- One of these was in salt water and one was in fresh water, use your knowledge of osmosis to label your diagrams as being in a hypertonic or hypotonic solution.