

Name: _____

Date: _____ Period: _____

Biology 10

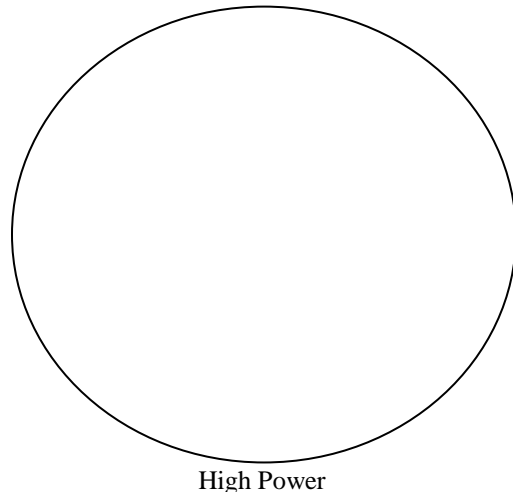
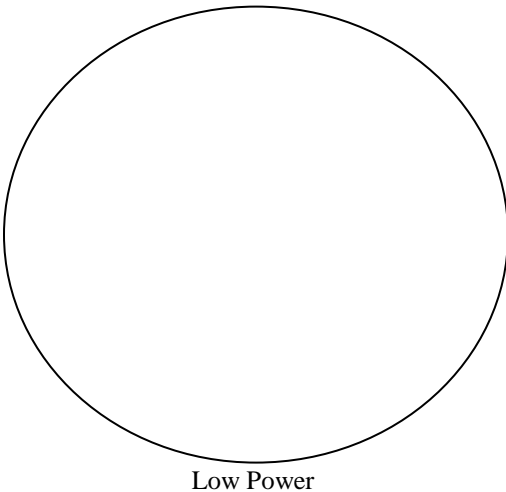
Cell Observation Lab

Part 1: Red Onion Cells

Materials needed:

Red onion slice (as thin as possible!)
Iodine
Microscope slide
Cover slip
Paper towel
Microscope

- 1) Place a thin slice of red onion on the microscope slide. Add a drop of water to the slice, and then a coverslip.
- 2) Place a drop of iodine along the edge of the coverslip, and use a small piece of paper towel to draw the iodine under the coverslip (see demonstration). CAUTION: IODINE WILL STAIN YOUR FINGERS/CLOTHING!!
- 3) Place the slide on the microscope stage. Focus on the onion cells using LOW power first. Draw the onion cells below.
- 4) Switch to the next highest power objective lens. Using the fine-focus knob ONLY, focus on the onion cells, and draw what you see below.
- 5) Label any organelles you see on your drawings.

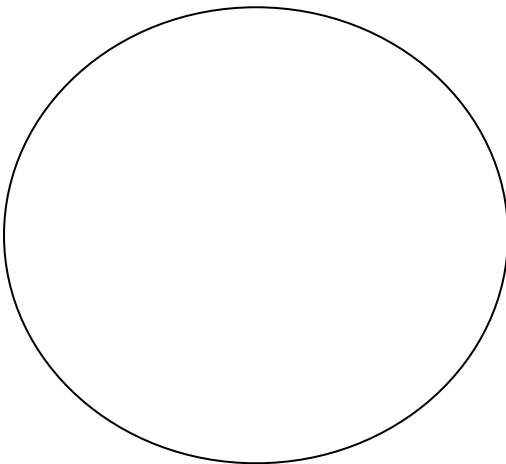


Part 2: Cheek Cells

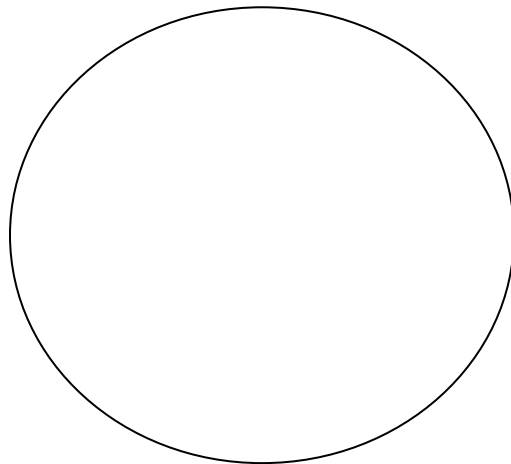
Materials needed:

Toothpick
Microscope slide
Coverslip
Methylene blue stain

- 1) Using the toothpick, GENTLY scrape the inside of your cheek.
- 2) Wipe the cheek material onto a microscope slide. Add a drop of water and place a coverslip over the cells.
- 3) Using the same technique as the iodine in part 1, add a drop of methylene blue to the edge of the coverslip and draw underneath using a small piece of paper towel.
- 4) Focus on the cheek cells using LOW power first. Draw what you see below
- 5) Switch to the next highest power, focus using the FINE FOCUS KNOB ONLY, and draw what you see below.
- 6) Label any organelles you see below.



Low Power



High Power

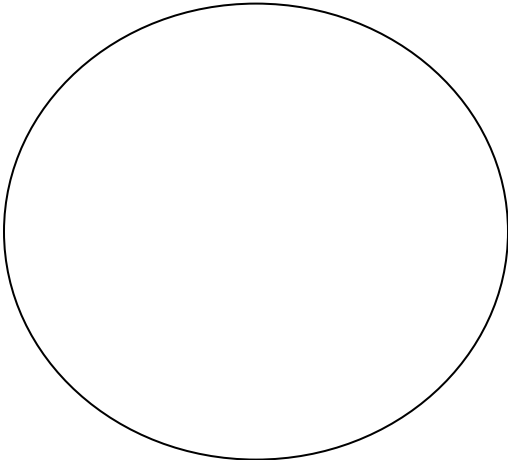
Part 3: Human Blood

Materials needed:

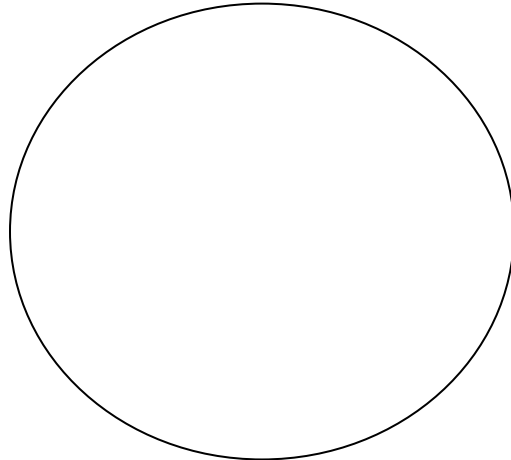
Microscope

Prepared slide of human blood

- 1) Focus on the blood cells using both low power and high power, draw what you see below.
- 2) Label any organelles that you see.



Low Power



High Power

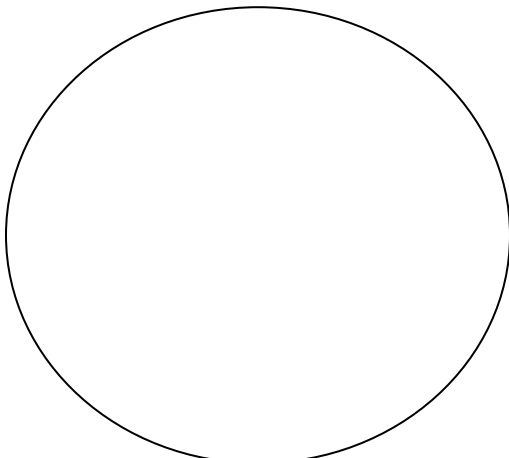
Part 4: Paramecium caudatum

Materials needed:

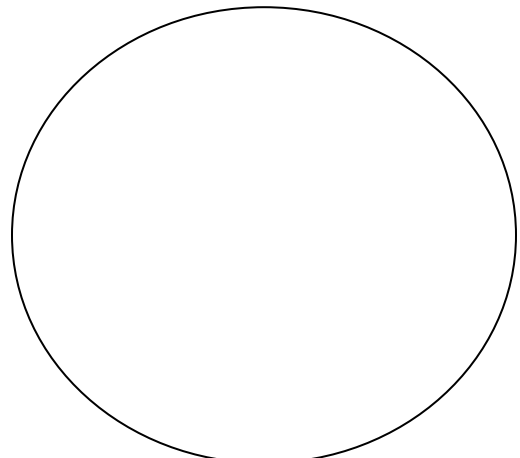
Microscope

Prepared slide of *Paramecium caudatum*

- 1) Focus on the *Paramecium* with both low and high power, draw what you see below.
- 2) Label any organelles you see.



Low Power



High Power

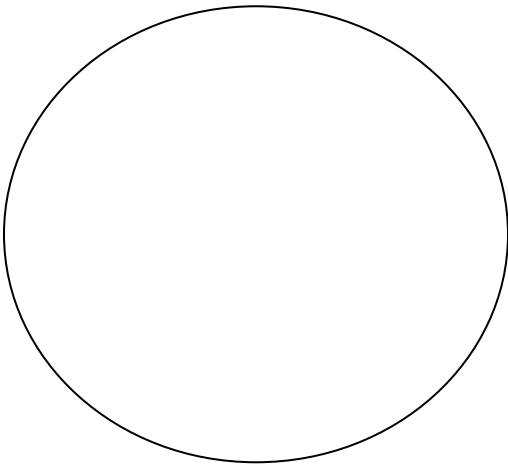
Part 5: *Ameba proteus*

Materials needed:

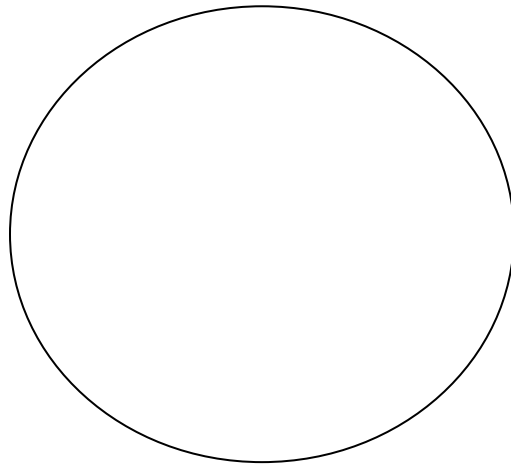
Microscope

Prepared slide of *Ameba proteus*

- 1) Focus on the *Ameba* with both low and high power, draw what you see below.
- 2) Label any organelles you see.



Low Power



High Power