



Cell Theory, Structure and Transport

Name: _____ Period: _____

Microviewer

Please carefully draw each Microviewer slide in detail. Always draw in pencil and shade using colored pencils. Label any structures that are pointed out in the circles below.

1. Cork and cell discovery: Describe how cells were named and discovered:

3. Green Leaf: What special function can the leaf cells of green plants perform?

4. Cheek Cells: What three parts of the animal cell can you see?

_____, _____ and _____.

7. Bacteria: Bacteria cells are prokaryotic, meaning they do not have a _____ containing DNA.

8. Virus: Why do some scientists consider viruses living organisms and others consider them nonliving?

1

3

4

7

8

Microscope Lab

Purpose: Students will observe plant cells using a light microscope. Two cells will be observed, one from the skin of an onion, and the other from a common aquarium water plant (anacharis).

Pre-lab Questions

1. What is the function of chloroplasts?
2. Name two structures found in plant cells but not animal cells.
3. Name three structures found in plant cells AND in animal cells.



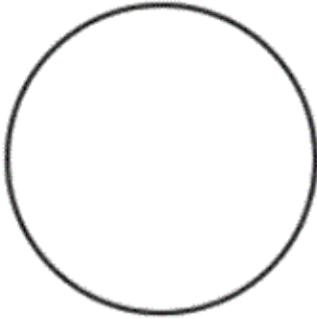
Name: _____ Period: _____



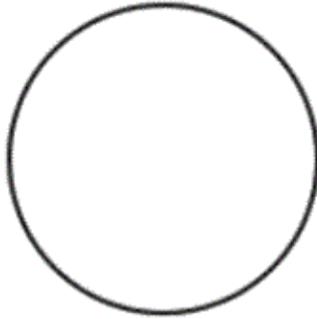
Part A - Onion Cells

Obtain a prepared slide of onion cells. View under the microscope and sketch the cells at each magnification. Label the cells as they appear under high power.

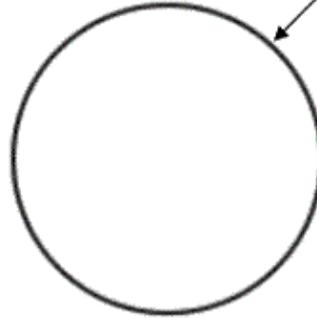
Scanning



Low Power



High Power



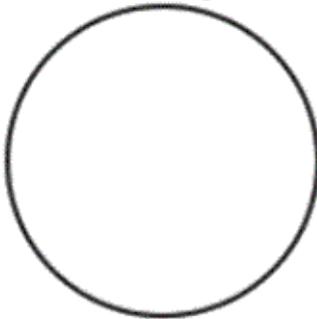
Label the

- Cell wall
- Nucleus
- Cytoplasm

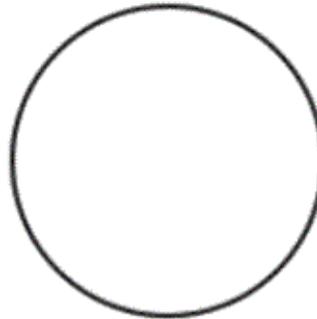
Part B - Whitefish Cells

View a prepared slide of whitefish cells. View under the microscope and sketch the cells at each magnification. Label the cells as they appear under high power.

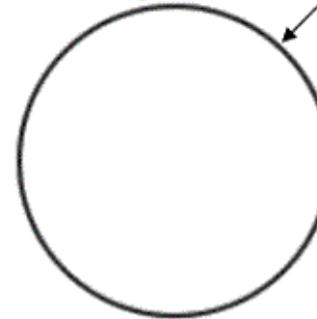
Scanning



Low Power



High Power



Label the

- Cell membrane
- Nucleus
- Cytoplasm

Post Lab Questions

1. What is the cell theory? _____

2. How do microscopes work? (use your book) _____

3. Fill out the Venn Diagram below to show the differences and similarities between the onion cells and the whitefish cells.

