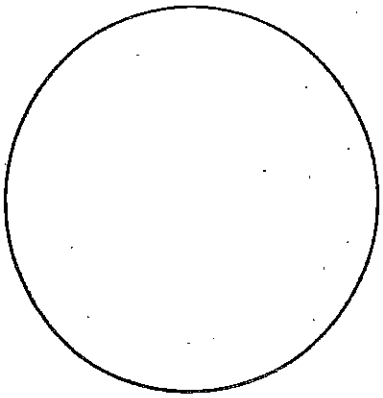
Name _____ Class _____ Date _____

Observations

Plate 1 High-power objective

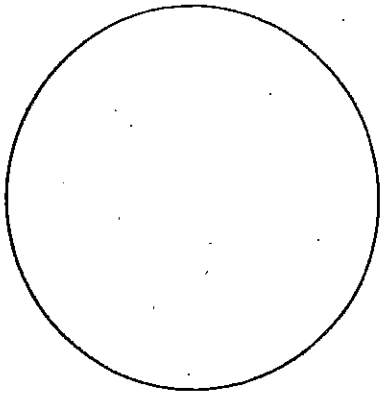
Magnification _____



Elodea cells
(Plant cells)

Plate 2 High-power objective

Magnification _____



Cheek cells
(Animal cells)

Analysis and Conclusions

1. Describe the shape of the *Elodea* cells and the cheek cells.

_____

_____

_____

_____

2. a. How are plant and animal cells similar in structure?

_____

_____

_____

b. How are plant and animal cells different? _____

_____

_____

_____

3. Why are stains such as methylene blue used when observing cells under the microscope?

_____

_____

_____

itical Thinking and Application

1. How is the cell wall different from the cell membrane?

2. Explain why you could not use an oak leaf in place of an *Elodea* leaf in this investigation.

3. If you were given a slide containing living cells, how would you identify the cells as either plant or animal?

ing Further

Remove the skin from some fruits and vegetables, such as tomatoes and leeks. Prepare wet-mount slides for each fruit or vegetable skin and observe them under the low-power and high-power objectives of your microscope. Sketch and label what you see. How do these cells compare with animal cells?