Name: _____ Homeroom: _____

Vascular Plants

Procedure:

1. Examine a celery stalk that has been standing in red food coloring for 24 hours.
2. Use a scalpel to cut off the top of the stem.
3. Diagram the arrangement of the tissues that have been stained red.
4. Cut off a slice of stem about 1 cm thick.
5. Cut a thin section lengthwise along one of the colored tubes and examine under the microscope.
6. Remove a leaf from the top of the stalk and examine under the microscope.

Observations:

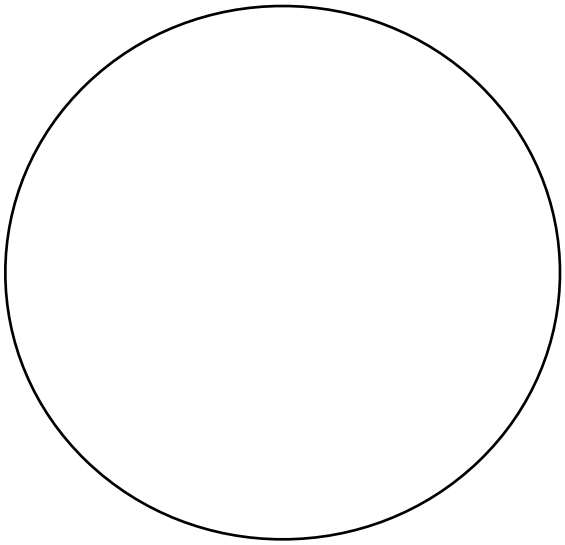


Diagram of Celery Stalk

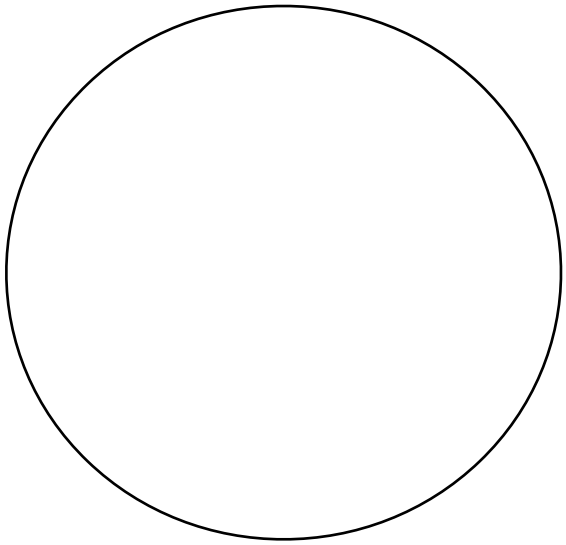
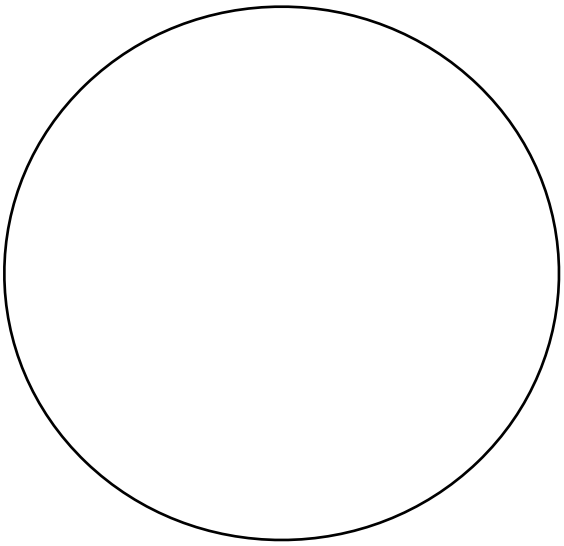
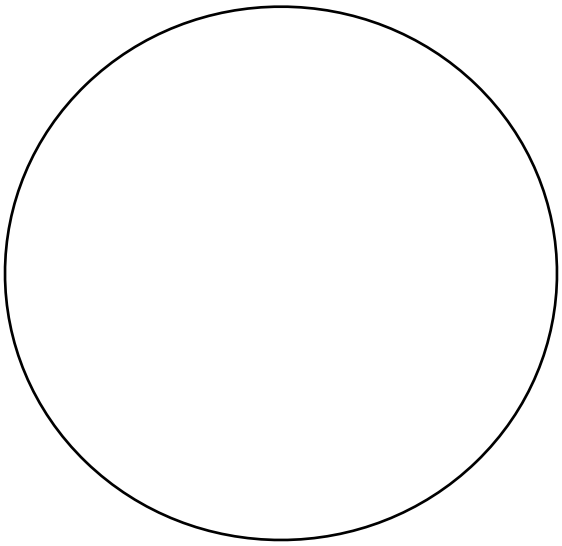


Diagram of Latitudinal Slice

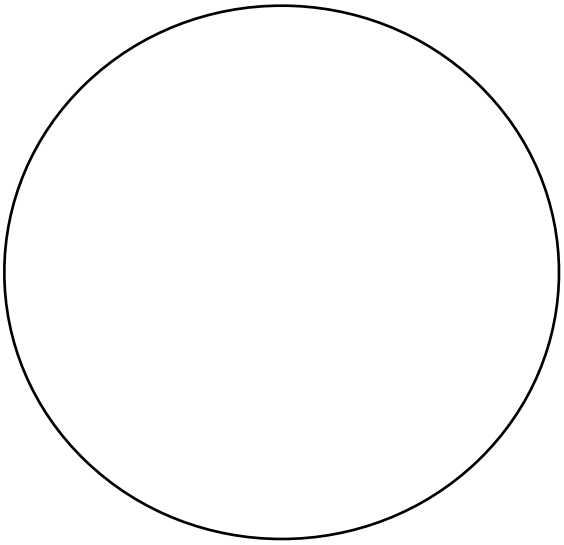
Name: _____ Homeroom: _____



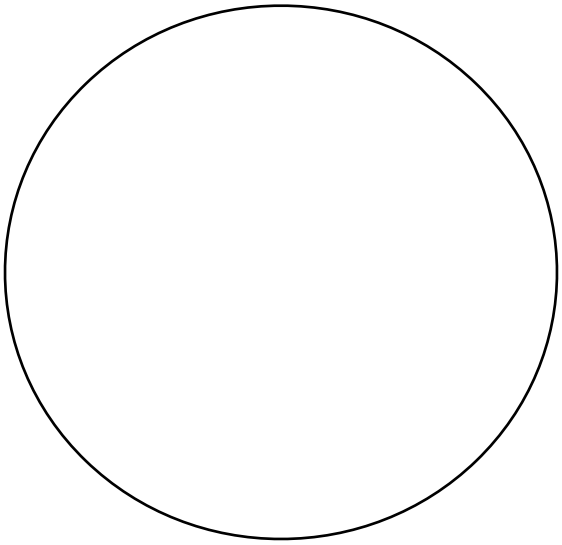
Longitudinal Slice Low Power



Longitudinal Slice Medium Power



Longitudinal Slice High Power



Leaf Medium Power

Conclusion:

1. How are the cells of the tubes specialized to conduct water upward through the stem?
2. The xylem tubes in the vascular plants are similar to what body part in animals?
2. How does water travel through a leaf?