

Answer the following questions and write your answers on a separate sheet of paper.

1. Draw and label the dermal, ground, and vascular tissues of the plant leaf, stem, and root. For each tissue, describe the component cells and give the function of each cell.
2. A group of similar plants was subjected to relatively high temperature for a considerable period. At the same time, another group was placed in normal room temperature. You were asked to observe the stomates and guard cells in the leaves and roots of the plants in the two groups. Discuss your observation.



Do the following activities.

1. View and observe under a microscope the cross sections of a stem, root, and leaf. Remember that each of these plant parts is made up of three kinds of plant tissues.
 - a. Mount a prepared slide of a monocot stem or a dicot stem. Observe under the low-power objective. Look closely and try to identify and classify the different plant tissues in the stem. Draw what you observed and label the three plant tissues which you were able to classify. Specify the function of each of the tissues in the plant stem.

- b. Using the low-power objective of the microscope, thoroughly examine a prepared slide of the cross section of a monocot root or a dicot root. Locate and classify the three plant tissue types. Draw your observation and label the classified tissues on your drawing. Give the respective functions of each tissue in the root.



2. Observe and describe a specific cell modification that is found in a root epidermis. Get 10 to 15 rice seeds. Cut a filter paper to the size of a petri dish. Place the filter paper on the dish and wet with water. Put the seeds on top of the filter paper. Let them germinate. Observe the germinating seeds for one to two weeks or until root hairs are observed. Make sure that the filter paper is always wet throughout the observation period. Note how long it took for the root hairs to appear. Describe the appearance of the roots and root hairs. Explain how root hairs help seedlings grow.

■ [Redacted]

[Redacted]

4. Tell the class which activity you enjoyed doing most and why. Share also what you observed and learned about that particular activity.