CROSS SECTION OF A LEAF

Name _____

Label the following parts of the leaf in the diagram below. Give the purpose/function of each part.

a. lower epidermis _____

b. upper epidermis _____

c. palisade layer _____

d. cuticle _____

e. stomate _____

f. guard cells _____

g. vein (fibrovascular bundle) _____

h. spongy layer _____

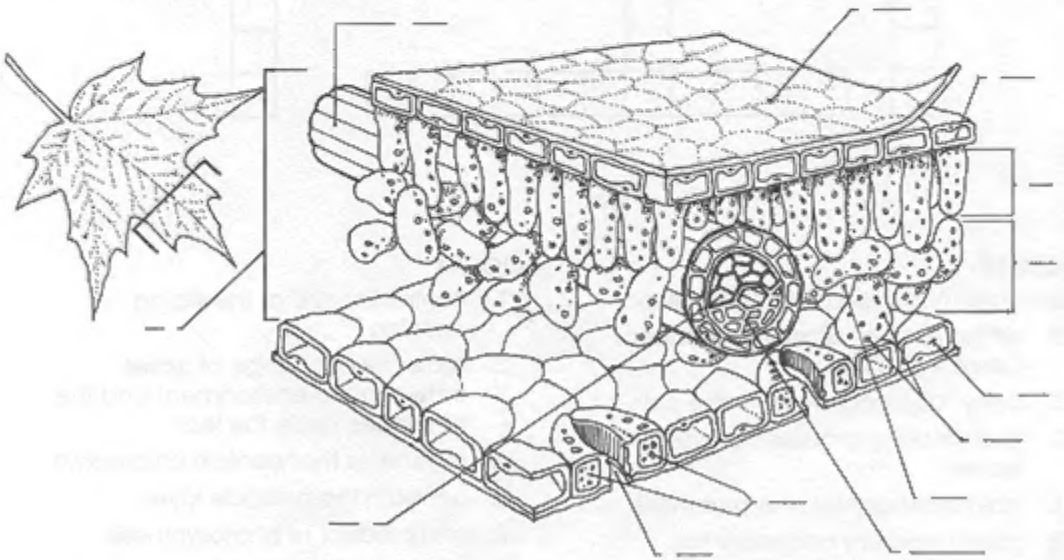
i. air space _____

j. xylem _____

k. phloem _____

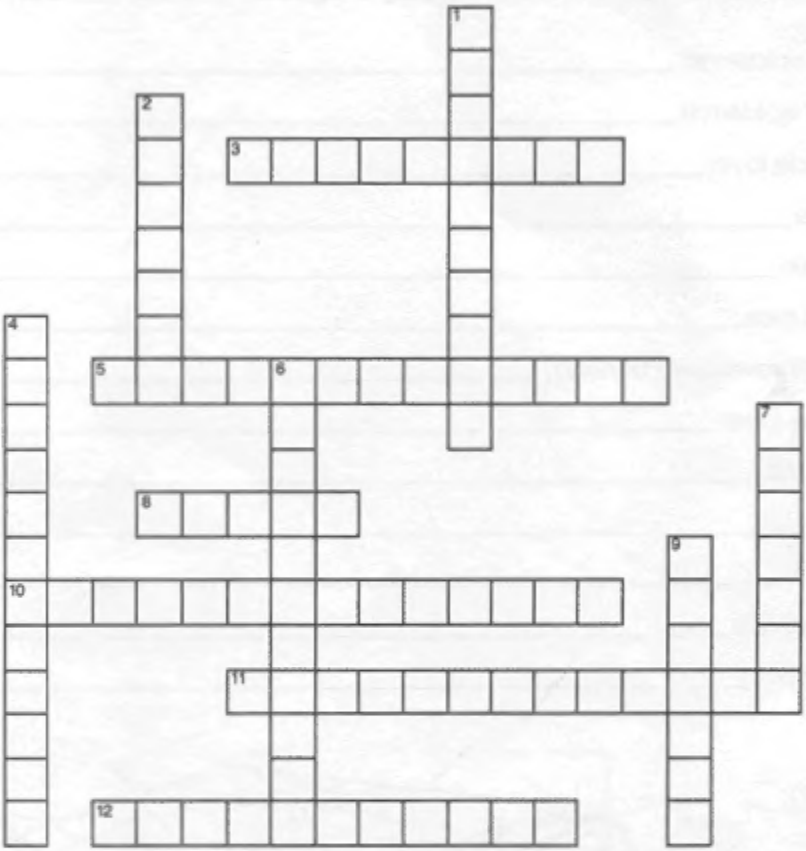
l. chloroplasts _____

m. mesophyll _____



LEAF CROSSWORD

Name _____



Across

3. outermost cellular layer of the leaf
5. where most photosynthesis takes place in the leaf
8. carry food and water to the cells
10. food-making process occurring in leaves
11. gas necessary for photosynthesis
12. green pigment necessary for photosynthesis

Down

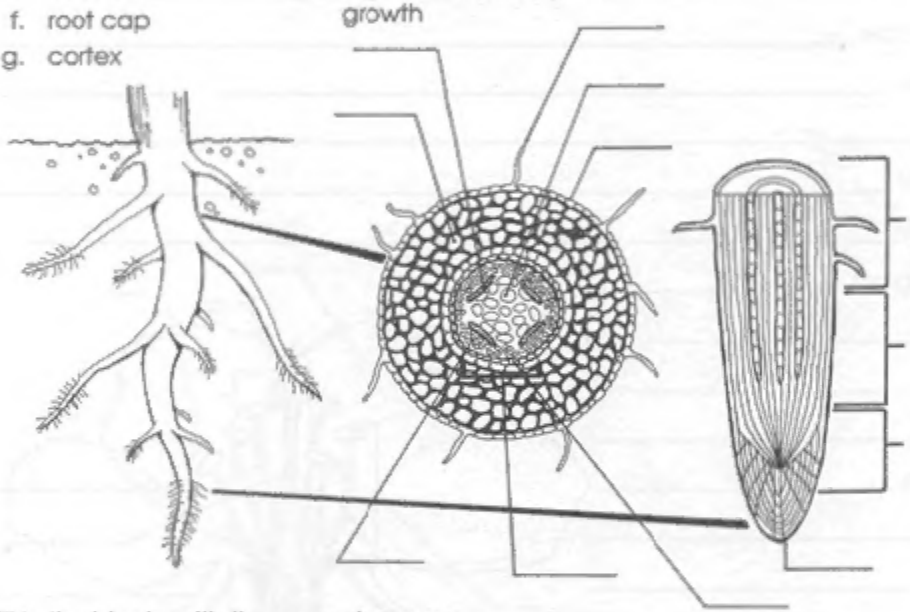
1. control the size of the stoma opening
2. allow the exchange of gases between the environment and the air spaces inside the leaf
4. organelles that contain chlorophyll
6. beneath the palisade layer
7. end product of photosynthesis
9. waxy coat of the leaf

STRUCTURE OF A ROOT

Name _____

Label the following parts on the diagrams of a cross-section and longitudinal section of a root below.

a. xylem
b. phloem
c. vascular cylinder
d. epidermis
e. foot hair
f. root cap
g. cortex
h. pericycle
i. cambium
j. region of differentiation
k. region of elongation
l. region of meristematic growth



Fill in the blanks with the correct answers.

The end of the root that absorbs minerals and _____ is the _____. The root tip is protected by several layers of cells called the _____. In the region of _____, cells mature and become specialized in function. Some cells in the outer layer develop _____. These _____ are elongated cells that increase the surface area of the root to maximize absorption of _____ and minerals from the _____. The _____ and vascular cylinder are separated by the _____. In the vascular cylinder, the xylem and _____ are separated by the _____.

STRUCTURE OF A FLOWER

Name _____

Label the parts of the flower in the diagram below. Give the purpose/function of each part.

a. ovary _____

b. style _____

c. stigma _____

d. sepal _____

e. receptacle _____

f. pedicel _____

g. petal _____

h. filament _____

i. anther _____

j. pollen grain _____

_____

k. pistil _____

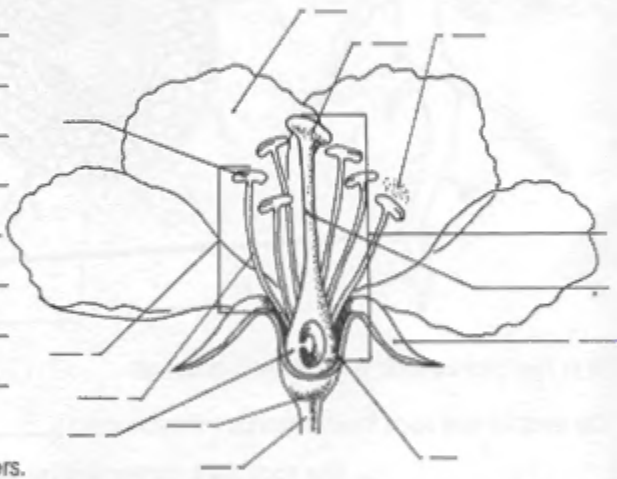
_____

l. stamen _____

_____

m. ovule _____

_____



Fill in the blanks with the correct answers.

If there are to be more flowers, _____ must take place. In pollination, pollen is transferred from the _____ to the _____. In detail, pollen is transferred from the _____ of the stamen to the _____ of the pistil. In some flowers, pollen falls on the stigma of the _____ flower. _____-pollination occurs. In other flowers, pollen from _____ flower falls on the stigma of a _____ flower. _____-pollination takes place.