

Write the answers on your own paper, not on this sheet.

1. Define the following terms:
 - a. Physiology
 - b. Nastic movement
 - c. Cohesion
 - d. Translocation
 - e. Hormones
 - f. Phototropism
 - g. Gravitropism
 - h. Thigmotropism

2. List the four processes for which plants require water.
3. What is the difference between nastic movement and phototropism?
4. Use the cohesion-tension theory to explain how a water molecule in the ground would move up in the leaf of a plant.
5. What substances do xylem contain? What substances do phloem contain?
6. List the five identified groups of plant hormones.
7. Which group of hormones are the primary force causing the three tropisms?
8. List three things that gibberellins can do.
9. List three things that cytokinins can do.
10. What does ethylene do?
11. Insectivorous plants contain chlorophyll and they do photosynthesis, so why do they trap insects?
12. List six different types of vegetative reproduction.
13. Watch this video about the Crazy Tree: https://www.youtube.com/watch?v=ik3i4U_17bl . What is the name of the man making the trees? What reproductive process is he using?

1. Define the following terms
 - a. Perfect flowers
 - b. Imperfect flowers
 - c. Pollination
 - d. Double fertilization
 - e. Seed
 - f. Fruit
2. What is the male reproductive organ of a flower? What is the female reproductive organ?
3. What two types of cells are found in a pollen grain?
4. Typically, how many cells are in an embryo sac? How many of them get fertilized?
5. How many sperm cells are used in plant fertilization?
6. Where does the endosperm come from? What is its purpose?
7. The cotyledons provide food for the plant before and after germination. How do they accomplish each task (before germination and after germination)?
8. What is the purpose of fruit?

Identify the structures of the flower:

