

B4 - plant tissues	Answer
1. Name 3 plant organs	Root, stem, leaf
2. What is the function of the epidermal tissues?	To cover the plant
3. What is the function of palisade mesophyll tissue?	To carry out photosynthesis as each palisade cell is packed with chloroplasts.
4. How is the spongy mesophyll adapted to its function?	It has air spaces between cells to allow gases to diffuse.
5. What travels through the xylem vessels?	Water with dissolved mineral ions in it. Xylem tissue is hollow tubes strengthened by lignin.
6. What travels through the phloem vessels?	Dissolved plant sugars from the leaves to the rest of the plant for use or storage.
7. What is meristem tissue?	It is the tissue found at the growing tips of shoots and roots. It can differentiate into other types of tissue.
8. Where are guard cells found on a leaf?	They are found on the lower surface of a leaf, either side of stomata. They control the opening and closing of the stomata for gas exchange and water loss..
9. By what process does water enter the root hair cell from the soil?	osmosis
10. By what process do mineral ions enter the root hair cell from the soil?	Active transport
11. What is transpiration?	This is the process by which water is moved up through a plant against gravity and lost through the stomata of leaves.
12. List 4 factors that affect the rate of transpiration of a plant.	1. Temperature 2. Humidity 3. Air flow 4. Light intensity
13. What is the movement of food through phloem known as?	translocation
14. What do phloem consist of?	Elongated cells with pores in the sieve plates at each end. Cell sap moves through the pores.