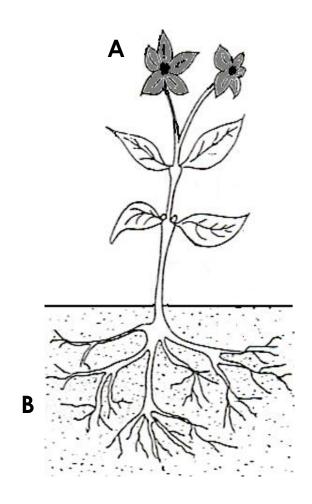
Structure and transport of flowering plants – exam questions

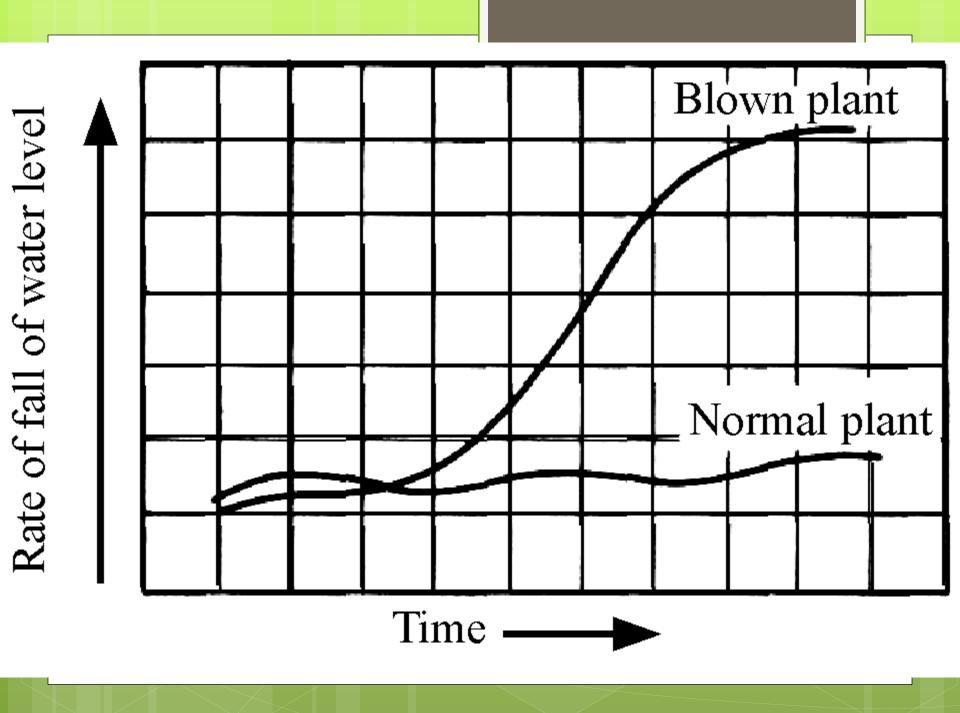
- o Give the function of each tissue.
- 1. Xylem
- 2. Phloem

 Name the parts of the plant labelled A and B.



• Water vapour leaves plants through pores in their leaves into the atmosphere. What is this loss of water by plants called?

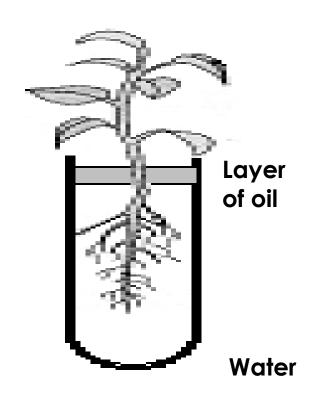
- A pupil did an experiment to investigate this loss of water by plants. The apparatus that she used is shown in the diagram.
- The rate at which the water level fell (water loss) in the measuring cylinder was measured at regular time intervals, first for a plant without the hair dryer (normal plant) and then for a plant with a hair dryer blowing warm air over the leaves (blown plant).
- The pupil used the data obtained to draw the graph below.



- Comment on the rate of water loss by the 'normal plant'.
- Examine the graph and comment on the rate of water loss by the 'blown plant'.
- What two factors were different for the 'blown plant'?
- Name the tissue that transports water up the plant from roots to leaves.

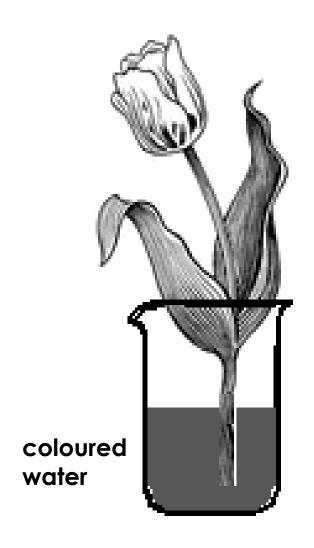
- What would you expect to happen to the level of water in the test tube after a few days?
- Which part of the plant takes in the water?
- The layer of oil is used to prevent

water from the test tube.



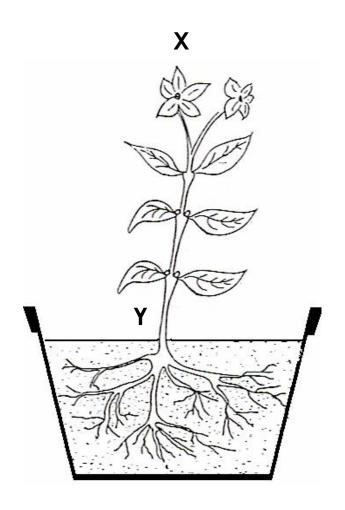
Condensation Evaporation Contamination

- A white flower was placed in coloured water for a few days as shown in the diagram.
- What effect would you expect this to have on the flower?
- What conclusion can be drawn about the movement of water in plants?



 Phloem and xylem are plant transport tissues. Name a substance, other than water, that is transported in (i) phloem (ii) xylem.

 Name the parts of the plant labelled X and Y in the diagram.



 The part of a plant where most food is made is the Root Leaf Iodine Litmus

The chemical used to test if a plant has made food (starch) is \_\_\_\_\_\_.

 Describe, with the help of a labelled diagram, how you would show the path of water upwards through a plant or a part of a plant

• Water vapour evaporates from cells in the leaves of plants and exits the leaves by way of tiny pores in their leaves. What is this process called?

• How would you test the drops of liquid inside the plastic bag covering the shoot of the plant shown in the diagram to show that the drops are water?



- The plant in the test tube drawn on the right was allowed stand in the laboratory for a few days to investigate the transport of water in the plant.
- Which part of the plant takes in water?
- What would you notice about the level of water in the test tube after a few days?
- Why is it necessary to put oil on the surface of the water in the test tube?

