

**I. Name the following:**

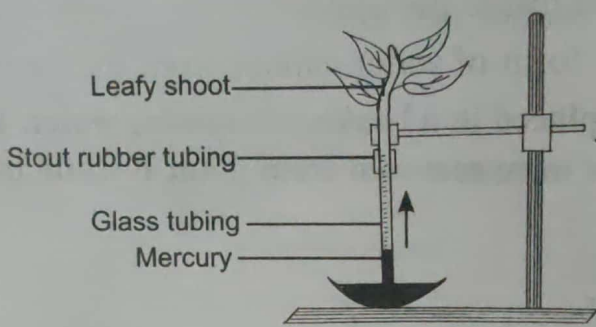
1. The waxy layer on the epidermis of the leaf meant to reduce transpiration.
2. The structure through which most of the transpiration takes place.
3. The process of loss of water in the form of droplets.
4. The small pores present on the leaf.
5. The experiment to demonstrate transpiration.
6. A chemical normally used to test the rate of transpiration on either side of a leaf.
7. The structure through which guttation takes place.
8. The kidney-shaped cells present on stomata.
9. Small openings present on the bark of woody stems.
10. The plant having sunken stomata.
11. A chemical used to prevent excessive transpiration in plants.
12. Three different kinds of structures of a plant from where transpiration occurs.
13. The process by which the aerial parts of a green plant give out water as water vapour.
14. Mention one condition in which the stomatal opening gets closed.
15. The cells which control the opening and closing of stomata.
16. The apparatus used to record the rate of transpiration in plants.
17. A factor which affect the transpiration.

Complete the following statements:

1. 97% of the total transpiration takes place through \_\_\_\_\_.
2. Exchange of gases in plants takes place through \_\_\_\_\_.
3. \_\_\_\_\_ has cooling effects on the leaves.
4. The leaves of the \_\_\_\_\_ plants have cuticular wax.
5. In *Nerium*, stomata are \_\_\_\_\_.
6. The minute pores on the epidermis of the leaf are known as \_\_\_\_\_.
7. \_\_\_\_\_ is an instrument for measuring the rate of transpiration.
8. The chemicals used to reduce the rate of transpiration are called \_\_\_\_\_.
9. Guttation occurs through \_\_\_\_\_.
10. More stomata are located on the \_\_\_\_\_ surface.
11. Folded leaves \_\_\_\_\_ transpiration.
12. The phenomenon of loss of water through a cut stem or injured part of plant is called \_\_\_\_\_.

2. stomata

8. The diagram demonstrates the process of transpiration in a plant:



- (i) What does the arrow indicate?
- (ii) Give reason for your answer.
- (iii) How is transpiration different from evaporation?
- (iv) Give two beneficial effects of transpiration for the plants.
- (v) Which conducting tissue for the plant does the glass tubing represent xylem or phloem