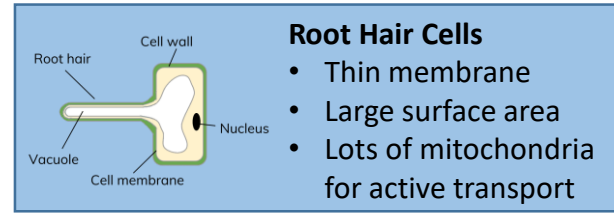
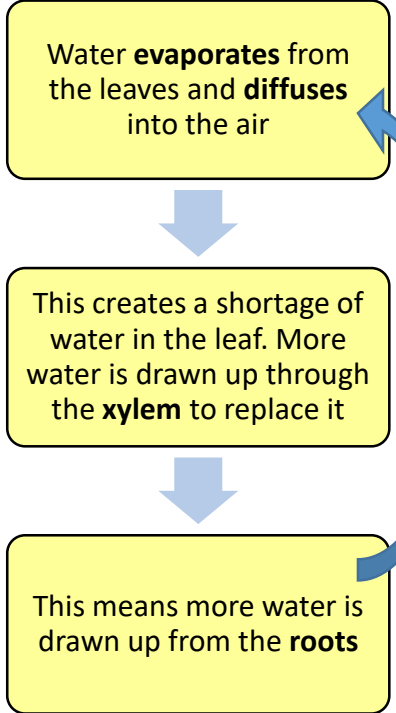


# Biology: Plant Organisation

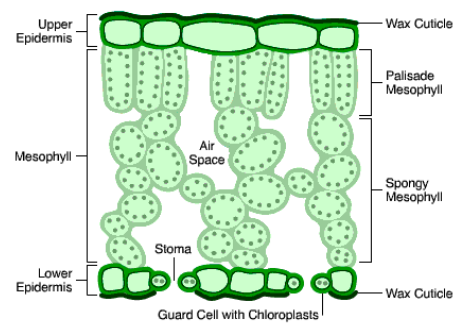
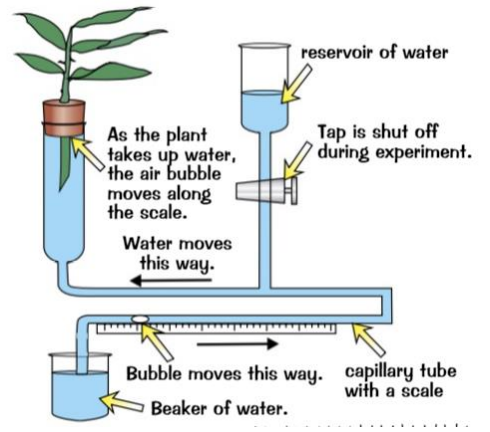
Key word	Definition
<b>Diffusion</b>	The net movement of particles from an area of high to low concentration (passive).
<b>Active transport</b>	The movement of dissolved molecules into or out of a cell through the cell membrane, from an area of lower concentration to an area of higher concentration (requires energy).
<b>Palisade cells</b>	Cells with many chloroplasts for photosynthesis.
<b>Translocation</b>	The movement of sugar around the plant.
<b>Humidity</b>	The amount of water vapour in the atmosphere.
<b>Gas Exchange</b>	The exchange of oxygen and carbon dioxide in living things.

Leaf Tissue	Function
<b>Waxy Cuticle</b>	Waterproof layer to prevent water loss.
<b>Upper epidermis</b>	<b>Transparent</b> to let light through to the <b>palisade cells</b> .
<b>Palisade Mesophyll</b>	Contains many <b>palisade cells</b> to absorb light for photosynthesis.
<b>Spongy Mesophyll</b>	Has air spaces to allow <b>gas exchange</b> .
<b>Stomata</b>	Holes that allow gases to <b>diffuse</b> in and out of the leaf.
<b>Guard Cells</b>	Control the opening and closing of <b>stomata</b> .

## Transpiration



## Potometer



**Factors affecting the rate of transpiration:**

- Light Intensity
- Temperature
- Humidity
- Wind Speed

**Xylem**

Moves water and mineral ions from the roots to the leaves

Labels: hollow tube of xylem, cell wall, lignin spirals

**Phloem**

Moves sugar around the plant by **translocation**

Labels: sieve plates, companion cells, phloem vessel, mitochondria

