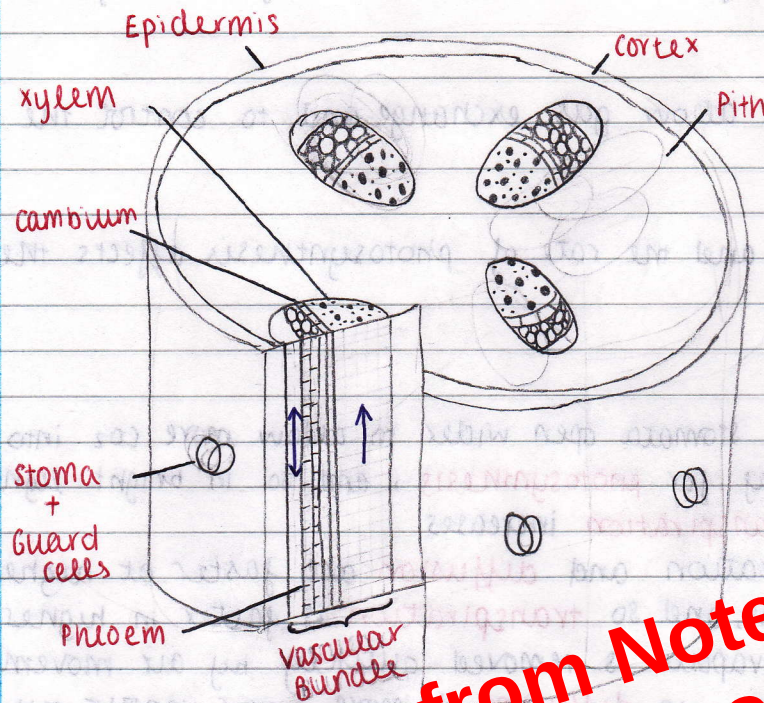


- once inside the root, the mineral ions move across the root mainly by **diffusion** and enter xylem vessels to be carried around the plant
- **diffusion** is the movement of solute molecules down a concentration gradient from a region of higher concentration of solute to a region of lower concentration

Stem Section



- **Phloem**: transports the products of photosynthesis from the leaves to other parts of the plant, e.g. sugars
- **Xylem**: carries water and minerals up from the roots to the leaves
- **Cambium**: Dividing cells that produce xylem and phloem
- **Epidermis**: covered in waxy cuticles to prevent loss of water
- **Pith**: stores nutrients throughout the plant, composed of soft, spongy parenchyma cells

- **Stoma + Guard cells**:
water vapour passes out of the leaf through here by diffusing through - this is where transpiration takes place

The leaf

