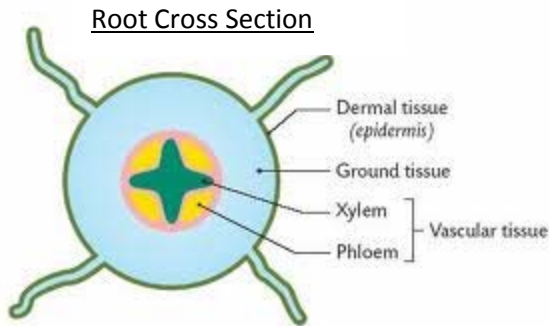


PLANT TISSUES AND TISSUE SYSTEMS

When plants and animals grow, the cells undergo differentiation to form specialized cells. Plants have meristematic cells to do this. They are located in root tips and stem tips where there is constant growth. The cells become one of three tissue types:



Dermal - outer surfaces of plant parts

Vascular - transport water, minerals and nutrients

Ground - all other structures in the plant

TISSUE	FUNCTION
Dermal	<p>epidermal tissue – covers surface of stem, leaf and root</p> <p>periderm tissue – in woody plants forms bark (stem) and covers large roots</p> <p>root dermal cells have hairs extending to absorb water and minerals from the soil</p> <p>leaf and stem produce wax covering (cuticle) to prevent water loss or have hairs to help with defence (some hairs are poisonous)</p>
Vascular	<p>xylem tissue – transports water and minerals from roots to the rest of the plant in hollow tubes – mature cells are not living</p> <p>phloem tissue – transports sugar solution from photosynthesis out of the leaves to the rest of the plant in hollow tubes – mature cells are living – transports hormones to plant parts, and stored food from roots</p>
Ground	perform photosynthesis, store food, support the plant structure