

## Photosynthesis

<u>Question</u>	<u>Answer</u>
<b>Describe</b> the function of the xylem	
<b>Describe</b> the function of the phloem	
<b>Define</b> transpiration	
<b>Describe</b> the adaptation of the roots	
<b>Describe</b> the adaptation of the stem	
<b>Describe</b> the adaptation of the cuticle	
<b>Describe</b> the adaptation of the palisade mesophyll	
<b>Describe</b> the adaptation of the spongy mesophyll	
<b>Describe</b> the adaptation of the guard cells	
<b>Define</b> photosynthesis	
<b>Give</b> the word equation for photosynthesis	
<b>Give</b> the uses of glucose in plants	
<b>Give</b> factors that affect the rate of photosynthesis	
<b>Give</b> the roles of roots	

<u>Question</u>	<u>Answer</u>
<b>Describe</b> the function of the xylem	Tissue that carries water from the roots to the leaves
<b>Describe</b> the function of the phloem	Tissue that carries dissolved sugars around the plant
<b>Define</b> transpiration	The loss of water vapour through pores in the leaf
<b>Describe</b> the adaptation of the roots	Root hair cells to increase surface area for absorption of water
<b>Describe</b> the adaptation of the stem	Tube like xylem to carry water Tube like phloem to carry dissolved sugars
<b>Describe</b> the adaptation of the cuticle	Reduces water loss and prevents the entry of pathogens
<b>Describe</b> the adaptation of the palisade mesophyll	Regular shaped cells with large numbers of chloroplasts to increase the rate of photosynthesis
<b>Describe</b> the adaptation of the spongy mesophyll	Provides air gaps to allow gas exchange (oxygen out, carbon dioxide in)
<b>Describe</b> the adaptation of the guard cells	Allow pores (stoma) to be opened and closed to control water loss
<b>Define</b> photosynthesis	The chemical reaction by which plants make glucose using light, carbon dioxide and water
<b>Give</b> the word equation for photosynthesis	Water + carbon dioxide → oxygen + glucose
<b>Give</b> the uses of glucose in plants	Make Starch Make Proteins Make Oils and fats
<b>Give</b> factors that affect the rate of photosynthesis	Light intensity Carbon dioxide concentration Temperature Colour of light Availability of water Number and size of leaves
<b>Give</b> the roles of roots	Stability of plant Absorb water and minerals

