

Green Plants (Biology)

Year 7, Summer Term

that plants need carbon dioxide, water and light for photosynthesis, and produce biomass and oxygen	that plants are important to maintaining the composition of the atmosphere by producing oxygen through photosynthesis
	that plants produce their own food through photosynthesis and that plants are the start of all food chains
	that oxygen is given off by plants during photosynthesis and that carbon dioxide is used up.
	that the rate of photosynthesis will increase with an increase in light intensity or carbon dioxide concentration
	how to perform a controlled experiment to show that light is needed for starch production by a potted plant [<i>e.g. geraniums</i>]
to summarise photosynthesis in a word equation	that photosynthesis is summarised by the word equation : $\text{carbon dioxide} + \text{water} \xrightarrow[\text{chlorophyll}]{\text{light energy}} \text{glucose} + \text{oxygen}$
	that in most plants the glucose is then converted into starch which can be tested for using iodine solution .
the role of root hairs in absorbing water and minerals from the soil	that root hairs increase the surface area for absorption of water and minerals such as nitrates
that plants carry out aerobic respiration	that plants carry out respiration – i.e. use oxygen – and that they also carry out photosynthesis – i.e. produce oxygen
	how the carbon cycle maintains a balance between respiration and photosynthesis and the effect of this on the atmosphere
	that bacteria and fungi (decomposers) break down dead plant and animal matter, adding nutrients to the soil. The bacteria and fungi carry out respiration in doing this and this adds to the carbon dioxide in the air.

http://www.bbc.co.uk/schools/ks3bitesize/science/biology/green_plants_intro.shtml