

5. Photosynthesis Revision Quiz

1.1 When testing a leaf for starch, which step takes the chlorophyll out of the leaf?

- boiling the leaf in water
- boiling the leaf in alcohol
- washing the leaf in cold water
- putting drops of iodine on the leaf

1.2 The process by which carbon dioxide moves through the leaves of a plant is called:

- brownian movement
- osmosis
- transpiration
- diffusion

1.3 Which one of the following factors will have little effect on the rate of photosynthesis?

- changing the light intensity
- having fewer chloroplasts
- increasing the oxygen in the air
- increasing the carbon dioxide in the air

(NOTE: 1.4, 1.5 and 1.6 are based on the following experiment. Some pondweed is placed in water and light is shone on it. Bubbles of gas are seen to come from the ends of the pondweed.) 1.4 The gas coming out during this experiment is:

- nitrogen
- oxygen
- water vapour
- carbon dioxide

1.5 The name of the process taking place in the pondweed is:

- transpiration
- photosynthesis
- respiration
- osmosis

1.6 Which one of these is NOT necessary for the bubbles of gas to be given off?

- carbon dioxide in the water
- light
- oxygen in the air
- chlorophyll in the leaves

1.7 Which of the following are products of photosynthesis?

- carbon dioxide and water
- carbon dioxide and sugars
- oxygen and water
- oxygen and sugars

1.8 Which statement is NOT correct regarding photosynthesis?

- oxygen is a by-product
- light is essential
- carbon dioxide is set free
- carbohydrates are made

1.9 Which one of the following would decrease during a day in a photosynthesising cell?

- carbon dioxide
- oxygen
- chlorophyll
- carbohydrates

1.10 When testing a leaf for starch, you boil the alcohol in a bath of water. This is because:

- alcohol evaporates quickly
- it softens the leaf
- alcohol is highly flammable
- the chlorophyll gets dissolved