

IGCSE Biology

Name: _____ Score: _____

1. The products of photosynthesis are:
 - ☐ glucose and oxygen
 - ☐ carbon dioxide and water
 - ☐ starch and protein
 - ☐ water and minerals
2. A leaf is broad and flat mainly to:
 - ☐ have a large surface area to capture light
 - ☐ store water
 - ☐ protect the plant
 - ☐ attract insects
3. The green pigment that absorbs light for photosynthesis is:
 - ☐ chlorophyll
 - ☐ glucose
 - ☐ haemoglobin
 - ☐ starch
4. Which leaf layer contains the most chloroplasts?
 - ☐ the palisade layer
 - ☐ the waxy cuticle
 - ☐ the lower epidermis
 - ☐ the veins
5. A limiting factor is one that:
 - ☐ is in shortest supply and holds back the rate
 - ☐ always speeds the reaction up
 - ☐ has no effect
 - ☐ is the product
6. Which does a plant need for photosynthesis? (Select all that apply.)
 - ☐ light
 - ☐ carbon dioxide

☐ water

☐ protein

Tick every correct option.

7. Guard cells open and close the stomata.

☐ True ☐ False

8. Glucose made in photosynthesis is often stored as _____.

9. A leaf is _____ so that gases can diffuse in and out over short distances.

10. Stomata are pores that allow:

☐ gases to enter and leave the leaf

☐ water to be stored

☐ light to be absorbed

☐ sugar to be made

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1. glucose and oxygen

$\text{CO}_2 + \text{water} \rightarrow \text{glucose} + \text{oxygen}$.

2. have a large surface area to capture light

Large surface area maximises light capture.

3. chlorophyll

Chlorophyll in chloroplasts traps light energy.

4. the palisade layer

The palisade layer near the top absorbs the most light.

5. is in shortest supply and holds back the rate

The scarcest factor limits the rate.

6. light; carbon dioxide; water

Light, CO_2 and water (plus chlorophyll) are needed; protein is not a raw material.

7. True

They control gas exchange and water loss.

8. starch

Starch is the plant's storage carbohydrate.

9. thin

Thinness shortens the diffusion distance.

10. gases to enter and leave the leaf

Stomata let CO_2 in and O_2 out.