Photosynthesis Quiz for Class 7

Practice

Quiz | Grade 7 | Science

Teachers Lab classroom material

Science | 15 questions | 15 marks | Suggested time: 12-15 minutes. Choose one answer for each question.

Teacher answer key

1. Food and soil (1 mark)

1. B. Green parts make food using light energy. Roots absorb water and minerals; these are not ready-made food.

2. The main pigment (1 mark)

1. C. Chlorophyll absorbs light energy. Iodine is a test reagent, not the pigment.

3. A gas entering the process (1 mark)

1. A. Carbon dioxide supplies carbon. Do not confuse it with the oxygen released.

4. Water uptake (1 mark)

1. B. Roots absorb water from soil, which the plant transports to other parts.

5. A product (1 mark)

1. C. Oxygen can leave the green parts as photosynthesis proceeds.

6. Energy source (1 mark)

1. A. Sunlight provides energy. Soil and the pot do not supply light energy.

7. A leaf starch test (1 mark)

1. B. The blue-black colour indicates starch. It does not directly measure the rate of photosynthesis.

8. A covered leaf area (1 mark)

1. A. The result supports the need for light in this setup, provided the other conditions were controlled.

9. A fair comparison (1 mark)

1. B. Light availability is the intended variable; the other stated conditions remain comparable.

10. Plants at night (1 mark)

1. C. Plants respire during day and night. Photosynthesis requires light, while respiration continues without it.

11. A green cactus stem (1 mark)

1. D. Green stems can photosynthesise. Photosynthesis is not restricted to leaf blades.

12. Fertiliser and darkness (1 mark)

1. B. Minerals support growth but cannot replace the light energy used for photosynthesis.

13. Destarching a plant (1 mark)

1. C. The plant uses stored food through respiration, reducing existing starch and making the later comparison more meaningful.

14. A useful summary (1 mark)

1. A. The statement distinguishes the inputs, products and conditions. Light supplies energy rather than being a food molecule.

15. A sensible conclusion (1 mark)

1. C. Lack of light limits photosynthesis. The observation alone does not show that all other conditions are absent or that every life process stopped.