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.

1. Food and soil (1 mark)

Which statement explains how a green plant obtains food?
A. Roots absorb ready-made food from soil.
B. Green parts make food using light energy.
C. Leaves obtain food by absorbing oxygen.
D. Flowers alone make food.

2. The main pigment (1 mark)

Which pigment helps green parts absorb light for photosynthesis?
A. Haemoglobin
B. Melanin
C. Chlorophyll
D. Iodine

3. A gas entering the process (1 mark)

Which gas supplies carbon for food formation during photosynthesis?
A. Carbon dioxide
B. Oxygen
C. Nitrogen
D. Hydrogen

4. Water uptake (1 mark)

Which part usually absorbs water from the soil?
A. Petal
B. Root
C. Fruit
D. Seed coat

5. A product (1 mark)

Which gas can green plants release during photosynthesis?
A. Nitrogen
B. Sulfur dioxide
C. Oxygen
D. Helium

6. Energy source (1 mark)

Which provides energy for photosynthesis under ordinary classroom conditions?
A. Sunlight
B. Soil particles
C. Oxygen from air
D. A pot

7. A leaf starch test (1 mark)

A prepared leaf sample turns blue-black when the teacher adds iodine solution. What does this indicate?
A. Protein is present.
B. Starch is present.
C. The leaf contains no food.
D. The leaf contains carbon dioxide bubbles.

8. A covered leaf area (1 mark)

After a suitable controlled investigation, only the uncovered green part of a leaf gives a positive starch test. What does this support?
A. Light is needed for starch formation in this setup.
B. Soil becomes starch.
C. All covered leaves lose every mineral.
D. Roots make chlorophyll.

9. A fair comparison (1 mark)

Two similar plants receive equal water and air. One receives light and the other stays in darkness. Which factor does this comparison vary?
A. Pot material and water
B. Light availability
C. All factors together
D. The kind of soil and plant

10. Plants at night (1 mark)

Which statement about respiration is correct?
A. Plants respire only in sunlight.
B. Plants stop respiring whenever photosynthesis stops.
C. Plants respire during day and night.
D. Only animals respire.

11. A green cactus stem (1 mark)

A cactus has green stems and leaves modified into spines. Which statement is most reasonable?
A. It can never make food.
B. Only its spines can make food.
C. Soil supplies all its sugar.
D. Its green stems can photosynthesise.

12. Fertiliser and darkness (1 mark)

A green plant stays in darkness for a long time. Can adding fertiliser replace the light needed for photosynthesis?
A. Yes, because fertiliser is sunlight.
B. No, minerals cannot replace light energy.
C. Yes, because roots turn minerals directly into light.
D. No, because plants never need minerals.

13. Destarching a plant (1 mark)

Why might a teacher keep a suitable plant in darkness before a controlled starch investigation?
A. To remove all water from it
B. To make the leaves absorb iodine
C. To reduce previously stored starch
D. To convert soil into sugar

14. A useful summary (1 mark)

Which word statement best summarises photosynthesis?
A. Carbon dioxide + water, using light and chlorophyll, form food and oxygen.
B. Oxygen + food form only soil.
C. Water + minerals form light.
D. Soil + oxygen form chlorophyll in every cell.

15. A sensible conclusion (1 mark)

A plant grows poorly in a dark cupboard despite receiving water. Which explanation best fits the information?

A. Water prevents all growth.

B. Darkness proves the soil contains no minerals.

C. Lack of light limits food production by photosynthesis.

D. The plant must have stopped every life process immediately.