

1. What is the primary product of photosynthesis that stores chemical energy?
 - A. Oxygen
 - B. Glucose
 - C. Water
 - D. Chlorophyll
2. Which of the following is NOT a participant in photosynthesis?
 - A. Green plants
 - B. Algae
 - C. Fungi
 - D. Some bacteria
3. Where does photosynthesis primarily occur in plant cells?
 - A. Mitochondria
 - B. Chloroplasts
 - C. Vacuoles
 - D. Cell nucleus
4. What pigment in chloroplasts absorbs sunlight for photosynthesis?
 - A. Carotene
 - B. Chlorophyll
 - C. Xanthophyll
 - D. Phycocyanin
5. Which stage of photosynthesis produces ATP and NADPH?
 - A. Calvin cycle
 - B. Light-independent reactions
 - C. Light-dependent reactions
 - D. Respiration
6. What is released as a byproduct when water molecules are split during photosynthesis?
 - A. Carbon dioxide
 - B. Oxygen
 - C. Starch
 - D. Glucose
7. During the Calvin cycle, what molecule from the atmosphere is used to synthesize glucose?
 - A. Nitrogen
 - B. Oxygen
 - C. Carbon dioxide
 - D. Water
8. What can glucose produced in photosynthesis be used for?
 - A. Only immediate energy
 - B. Only stored as starch
 - C. Immediate energy or stored as starch
 - D. Building cell walls only
9. Which of the following is NOT a factor affecting photosynthesis?
 - A. Light intensity
 - B. Temperature
 - C. Humidity
 - D. Carbon dioxide concentration

10. Why is photosynthesis essential for life on Earth?
- A. It produces water for all organisms
 - B. It provides oxygen and food for other living organisms
 - C. It breaks down chlorophyll
 - D. It converts chemical energy into light energy
11. What is the primary product of photosynthesis that stores chemical energy?
- A. Oxygen
 - B. Glucose
 - C. Chlorophyll
 - D. ATP
12. Which pigment in chloroplasts is responsible for absorbing sunlight during photosynthesis?
- A. Carotenoid
 - B. Chlorophyll
 - C. Xanthophyll
 - D. Phycobilin
13. Where does photosynthesis primarily occur in plant cells?
- A. Mitochondria
 - B. Chloroplasts
 - C. Vacuoles
 - D. Cell membrane
14. What is the byproduct released during the splitting of water in light-dependent reactions?
- A. Carbon dioxide
 - B. Oxygen
 - C. Glucose
 - D. NADPH
15. Which stage of photosynthesis uses ATP and NADPH to synthesize glucose?
- A. Light-dependent reactions
 - B. Calvin cycle
 - C. Respiration
 - D. Glycolysis
16. What is the main function of the light-dependent reactions in photosynthesis?
- A. Synthesizing glucose
 - B. Producing ATP and NADPH
 - C. Releasing carbon dioxide
 - D. Breaking down starch
17. How can plants store glucose produced during photosynthesis?
- A. As proteins
 - B. As starch
 - C. As lipids
 - D. As nucleic acids
18. Which of the following is NOT a factor affecting photosynthesis?
- A. Light intensity
 - B. Temperature
 - C. Nutrient availability
 - D. Gravity

19. What is the role of carbon dioxide in the Calvin cycle?
- A. To produce ATP
 - B. To synthesize glucose
 - C. To split water molecules
 - D. To absorb sunlight
20. Which of the following organisms does NOT perform photosynthesis?
- A. Green plants
 - B. Algae
 - C. Fungi
 - D. Some bacteria
21. What is the primary function of photosynthesis?
- A. Convert light energy into chemical energy stored in glucose
 - B. Break down glucose to release energy
 - C. Absorb carbon dioxide to produce oxygen
 - D. Decompose organic matter
22. Which of the following organisms perform photosynthesis?
- A. Green plants, algae, and some bacteria
 - B. Only green plants
 - C. Animals and fungi
 - D. All living organisms
23. Where does photosynthesis mainly occur in plant cells?
- A. Chloroplasts
 - B. Mitochondria
 - C. Cell nucleus
 - D. Cell membrane
24. What pigment in chloroplasts absorbs sunlight?
- A. Chlorophyll
 - B. Carotenoid
 - C. Xanthophyll
 - D. Melanin
25. What are the two main stages of photosynthesis?
- A. Light-dependent reactions and Calvin cycle
 - B. Glycolysis and Krebs cycle
 - C. Respiration and fermentation
 - D. Nitrogen fixation and denitrification
26. What is the byproduct of splitting water molecules during the light-dependent reactions?
- A. Oxygen
 - B. Carbon dioxide
 - C. Glucose
 - D. ATP
27. What molecules are produced during the light-dependent reactions?
- A. ATP and NADPH
 - B. Glucose and starch
 - C. Chlorophyll and carotenoids
 - D. Water and carbon dioxide

28. What is the role of carbon dioxide in photosynthesis?
- A. Used in the Calvin cycle to synthesize glucose
 - B. Produced as a byproduct of the light-dependent reactions
 - C. Absorbed by chlorophyll to power reactions
 - D. Stored as starch in plant cells
29. What can glucose produced by photosynthesis be used for?
- A. Immediate energy or stored as starch
 - B. Only for immediate energy
 - C. Breaking down into water and oxygen
 - D. Converting into chlorophyll
30. Which of the following is NOT a factor affecting photosynthesis?
- A. Light intensity
 - B. Temperature
 - C. Availability of oxygen
 - D. Carbon dioxide concentration
31. Fallback Question 1: What is discussed in the document?
- A. Option A
 - B. Option B
 - C. Option C
 - D. Option D
32. Fallback Question 2: What is discussed in the document?
- A. Option A
 - B. Option B
 - C. Option C
 - D. Option D
33. Fallback Question 3: What is discussed in the document?
- A. Option A
 - B. Option B
 - C. Option C
 - D. Option D
34. Fallback Question 4: What is discussed in the document?
- A. Option A
 - B. Option B
 - C. Option C
 - D. Option D
35. Fallback Question 5: What is discussed in the document?
- A. Option A
 - B. Option B
 - C. Option C
 - D. Option D
36. Fallback Question 6: What is discussed in the document?
- A. Option A
 - B. Option B
 - C. Option C
 - D. Option D

37. Fallback Question 7: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

38. Fallback Question 8: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

39. Fallback Question 9: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

40. Fallback Question 10: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

41. Fallback Question 1: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

42. Fallback Question 2: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

43. Fallback Question 3: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

44. Fallback Question 4: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

45. Fallback Question 5: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

46. Fallback Question 6: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

47. Fallback Question 7: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

48. Fallback Question 8: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

49. Fallback Question 9: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D

50. Fallback Question 10: What is discussed in the document?

- A. Option A
- B. Option B
- C. Option C
- D. Option D