

- _____ 13. Plants that require short nights to flower are called _____ plants.
- | | |
|--------------|----------------|
| a. short-day | c. long-day |
| b. periodic | d. day-neutral |

Matching

Match each term with the correct description below.

- | | |
|-----------------------|---------------------|
| a. long-day plants | g. short-day plants |
| b. gibberellins | h. abscisic acid |
| c. stimulus | i. tropism |
| d. cytokinins | j. auxin |
| e. day-neutral plants | k. photosynthesis |
| f. photoperiodism | l. respiration |

- _____ 14. can be mixed with water and sprayed on plants and seeds to stimulate growth
- _____ 15. plant process that produces food for nearly all the other organisms on Earth
- _____ 16. can be sprayed on stored vegetables to keep them fresh longer
- _____ 17. plants that require short nights to flower
- _____ 18. causes plant stems to exhibit positive response to light
- _____ 19. substance that has the reverse effect of hormones that cause plant growth
- _____ 20. a plant's response to the number of hours of daylight and darkness it receives
- _____ 21. changes food energy into a form all cells can use
- _____ 22. plants that require 12 or more hours of darkness to flower
- _____ 23. can be external or internal
- _____ 24. can be positive or negative
- _____ 25. plants that have a range of hours of darkness needed to flower

Short Answer

26. Why do plant cells need glucose?
27. What would be a plant's response to cytokinins?
28. Explain how respiration is the opposite reaction to photosynthesis.
29. How does auxin cause a plant to exhibit positive phototropism?
30. Leaves of many trees change color in the autumn, die, and drop off. What stimuli are the trees responding to?
31. How does a plant take in water?
32. Why do sunflowers bloom only in the summer?
33. From your own observations, would you say that dandelions are short-day, long-day, or day-neutral plants? Why?
34. How does water vapor leave a leaf?
35. Why is photosynthesis important to you?

Name: _____

ID: A

36. Describe two ways that plants use the products of photosynthesis.
37. Photosynthesis requires carbon dioxide, water, and light energy to make glucose. Explain why photosynthesis slows down as fall approaches.
38. You buy green bananas at the grocery store. Your mother puts them in a paper sack for a few days. Why?

True/False

Indicate whether the sentence or statement is true or false.

- ____ 39. Photosynthesis releases energy.
- ____ 40. Light energy, $6\text{H}_2\text{O}$, and 6CO_2 are at the start of photosynthesis.
- ____ 41. 6CO_2 , $6\text{H}_2\text{O}$, and energy are the result of aerobic respiration.
- ____ 42. Photosynthesis stores energy.
- ____ 43. $\text{C}_6\text{H}_{12}\text{O}_6$ and 6O_2 are the result of respiration.
- ____ 44. An auxin is a type of plant tropism.
- ____ 45. $\text{C}_6\text{H}_{12}\text{O}_6$ and 6O_2 are at the start of photosynthesis.
- ____ 46. Hormones control the growth changes that result from tropisms.
- ____ 47. Fruits that are picked green will never ripen.
- ____ 48. Photosynthesis takes place in cells with chloroplasts.
- ____ 49. Respiration takes place in the cells of most organisms.
- ____ 50. Many plants produce ethylene gas.