

- 1 What are the products of photosynthesis?
  - A carbon dioxide and water
  - B oxygen and water
  - C carbon dioxide and sugars
  - D oxygen and sugars
  
- 2 How does photosynthesis benefit heterotrophs?
  - A It adds carbon dioxide to the air.
  - B It creates food that they can eat.
  - C It eliminates harmful sugars.
  - D It creates clean water.
  
- 3 What happens during respiration?
  - A Oxygen is released into the air.
  - B Glucose is broken down, releasing energy.
  - C Carbohydrates are released into the bloodstream.
  - D Water and carbon dioxide are converted into energy.
  
- 4 Mitosis is the stage of the cell cycle during which
  - A the cell's nucleus divides into two new nuclei.
  - B the cell's DNA is replicated.
  - C the cell divides into two new cells.
  - D the cell's cytoplasm divides.
  
- 5 Carbon dioxide enters plants through the
  - A pigments.
  - B chloroplasts.
  - C chlorophyll.
  - D stomata.

- 6 During what stage of the cell cycle does replication occur?
- A interphase
  - B cytokinesis
  - C prophase
  - D mitosis
- 7 The regular cycle of growth and division that cells undergo is called
- A replication.
  - B the cell cycle.
  - C interphase.
  - D mitosis.
- 8 Under which of the following conditions is lactic-acid fermentation most likely to occur?
- A a very fast run
  - B a long walk
  - C sleeping
  - D playing video games
- 9 What forms around the chromatids during mitosis?
- A two new chromosomes
  - B two new nuclei
  - C two new cells
  - D two new DNA molecules
- 10 What is copied during replication?
- A the cell's organelles
  - B chromosomes
  - C the cell's DNA
  - D two daughter cells

- 11 The stage of respiration that releases most of the energy in glucose occurs in the
- A nucleus.
  - B chloroplast.
  - C cytoplasm.
  - D mitochondria.
- 12 How are photosynthesis and respiration related?
- A They have opposite equations.
  - B They have the same equation.
  - C They both produce carbon dioxide.
  - D They both produce oxygen.
- 13 What happens during cytokinesis in animal cells?
- A A new round of mitosis begins.
  - B Two new daughter cells are formed.
  - C Each organelle divides into two parts.
  - D A cell plate forms in the middle of the cell.
- 14 What captures energy from sunlight during photosynthesis?
- A solar cells
  - B stomata
  - C chlorophyll
  - D carbohydrates
- 15 What are chromatids?
- A identical strands of chromosomes
  - B identical daughter cells
  - C doubled rods of centromeres
  - D pigments that absorb the energy in sunlight

- 16 The stage of the cell cycle that follows mitosis is called
- A interphase.
  - B metaphase.
  - C cytokinesis.
  - D telophase.