

Cell Biology

Name:

Cell Functions Benchmark Review

Period:

Use your brain to answer the following questions, then check your work using Chapter 5, Section 1 and Chapter 13, Section 1.

Chapter 13, Section 1 questions

_____ 1. In the sentence "As multicellular organisms develop their cells differentiate," what does the word differentiate mean?

- a. migrate
- b. grow
- c. become different in structure and function
- d. change orientation and location in the organism

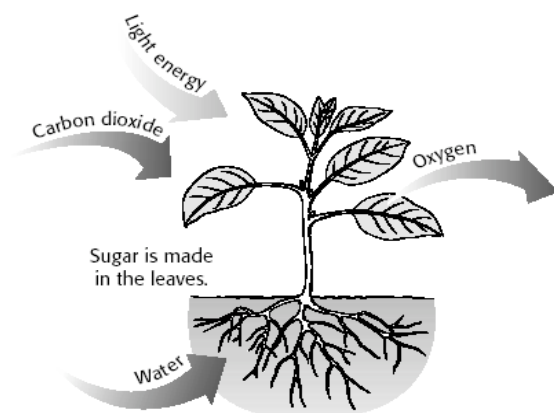
Complete each of the following sentences by choosing the correct term from the words below.

stoma photosynthesis cellular respiration chlorophyll transpiration

2. The loss of water from leaves is called _____.
3. _____ is a green pigment found in plant cells.
4. To get energy from the food made during photosynthesis, mitochondria in the cells of plants use the process of _____.
5. A _____ is an opening in the epidermis and cuticle of a leaf.
6. _____ is the process by which plants make their own food.
- _____ 7. During gas exchange in plants,
 - a. carbon dioxide exits the leaf while oxygen and water enter the leaf.
 - b. oxygen and water exit the leaf while carbon dioxide enters the leaf.
 - c. carbon dioxide and water enter the leaf while oxygen exits the leaf.
 - d. carbon dioxide and oxygen enter the leaf while water exits the leaf.
8. Describe the relationship between photosynthesis and cellular respiration.

Use the image to the right to answer the next question.

9. The three darker arrows in the diagram above show gas exchange in the plant. How is the intake of carbon dioxide related to the release of oxygen?



turn the page over for more questions

Cell Biology

Cell Functions Benchmark Review

Name:

Period:

Chapter 5, Section 1 questions

10. In the sentence "The process of photosynthesis converts energy from the sun into food," what does the word *process* mean?

Complete each of the following sentences by choosing the correct term from the words below.

cellular respiration chloroplasts mitochondria photosynthesis

11. Plants perform _____ to make glucose.

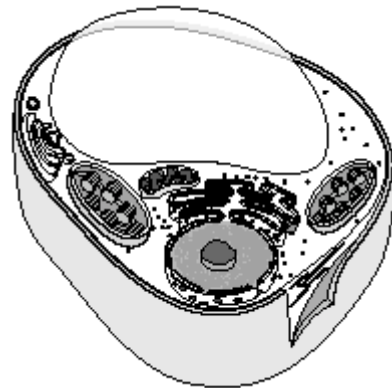
12. During _____, oxygen is used to break down food molecules, releasing large amounts of energy.

13. The cell structures that are needed for photosynthesis are _____, and the cell structures that are needed for cellular respiration are _____.

The picture to the right shows a cell. Use the picture to answer the next question.

14. Does the picture show a plant cell or an animal cell? How do you know?

It shows a _____ cell because....



15. How are chlorophyll and chloroplasts related, and where are they found?

16. How are mitochondria related to ATP?