

Skills Worksheet

Directed Reading A

Section: Cell Energy

1. Why do cells need energy?

2. Where do plant cells get their energy? _____

3. Where do many animal cells get the energy they need?

FROM SUN TO CELL

_____ 4. Where does almost all of the energy that fuels life come from?

- | | |
|--------------|------------|
| a. the Earth | c. plants |
| b. gasoline | d. the sun |

5. Plants are able to change the sun's energy into food through the process of _____.

6. The molecules in plant cells that absorb light energy are called _____.

7. Plants get their green color from _____.

8. What is glucose?

9. Explain why glucose is important to a plant cell.

10. Photosynthesis produces _____ and _____.

Directed Reading A *continued*

GETTING ENERGY FROM FOOD

11. Cells use _____ to break down food.
12. Many cells are able to get energy without using oxygen through a process called _____.
13. Why is breathing important to many organisms?
- _____
- _____
- _____
14. Describe what takes place during cellular respiration in complex organisms.
- _____
- _____
15. What does your body do with the energy released during cellular respiration?
- _____
- _____
16. Adenosine triphosphate, also called ATP, supplies _____ that fuels cell activities.
17. Cellular respiration in the cells of eukaryotes takes place in _____ inside the cell.
18. During photosynthesis, plant cells use carbon dioxide to make glucose and release oxygen. How is this different from cellular respiration?
- _____
- _____
- _____
19. Why do you get a burning sensation in your muscles during strenuous exercise?
- _____
- _____
- _____
- _____

Directed Reading A *continued*

20. What is another kind of fermentation?

21. How does the process of fermentation help bread rise?

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|---|---|
| _____ 22. This occurs when cells use oxygen to produce energy from food. | a. oxygen |
| _____ 23. This is the breakdown of food without using oxygen. | b. yeast |
| _____ 24. This forms carbon dioxide, CO ₂ , during fermentation and is used to help bread rise. | c. the sun's energy |
| _____ 25. This is converted into food by the process of photosynthesis. | d. cellular respiration |
| _____ 26. This is released during photosynthesis, when cells take in CO ₂ . | e. water, carbon dioxide, and energy |
| _____ 27. This is released by cells during cellular respiration. | f. fermentation |