

Cell Review

BIOLOGY

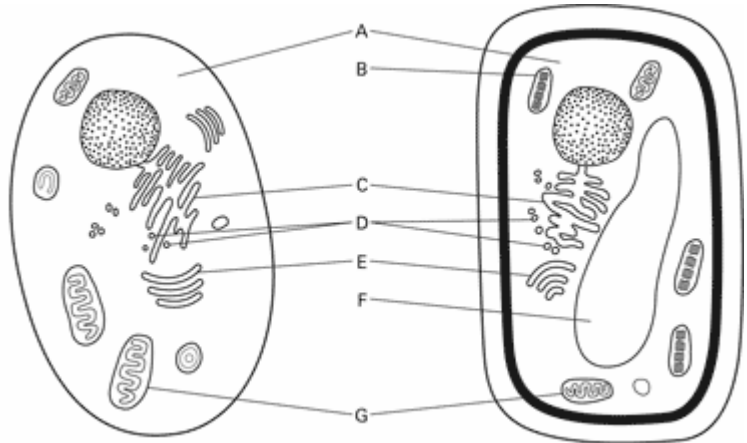
Directions: Answer the following questions using your notes and chapters 3-5 in your textbook. The test will be 70 multiple choice questions covering this material.

1. Answer the following questions using the diagram to the right

a. What is the name of structure **G** and what process takes place there?

b. What is the name of structure **B** and what process takes place there?

c. What is the name of structure **F** and what is the function of this structure?

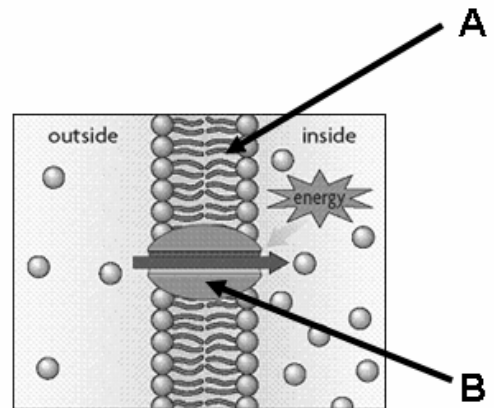


2. The diagram to the right shows a typical cell membrane.

a. What type of **molecules** make up the cell membrane (**part A**)?

b. What type of organic compound makes up the channels in the cell membrane (**Part B**)?

c. What type of **cell transport** is demonstrated in the diagram and why?

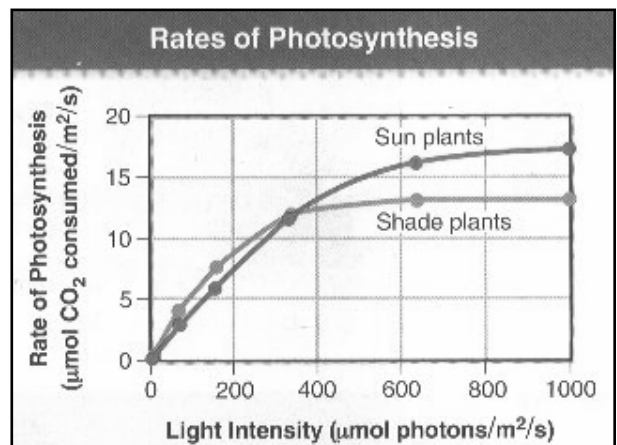


3. Identify the **dependent** and **independent variables** in the graph to the right

a. dependent variable –

b. independent variable-

4. What conclusions can you make from the data in the graph to the right?



5. What is the role of **spindle fibers** during cell division?

6. What is **diffusion**?

7. What is **osmosis**?

8. What is the function of the **cell wall**? What type of organisms have a cell wall?

9. Complete the chart:

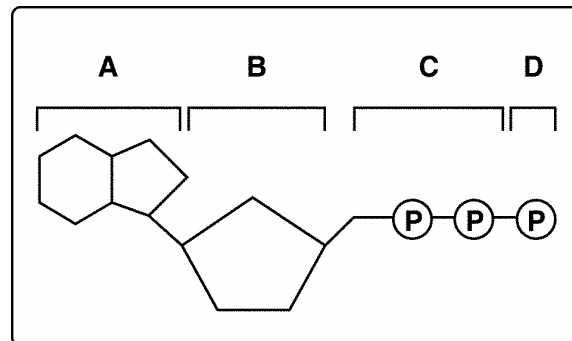
Cell structure	Process	Function	Equation
	Cellular respiration		
chloroplast			

10. Label the **ATP** molecule to the right:

A-

B-

C & D-



11. How and where does the **ATP** molecule store energy?

12. What is a **producer** and a **consumer**? Give examples of each.

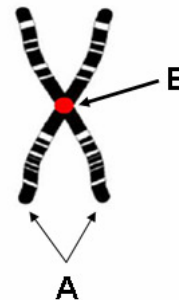
13. When does **fermentation** take place?

14. What are the two types of **fermentation**?

15. What is meant by **aerobic** and **anaerobic** respiration? What is another name for anaerobic respiration?

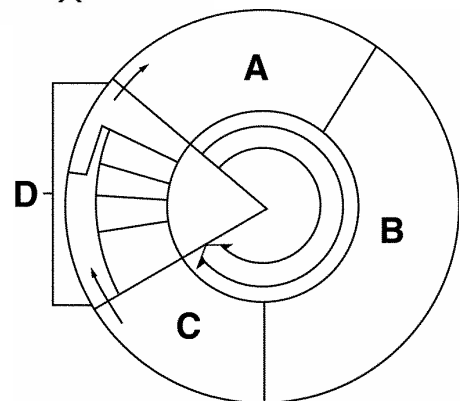
16. What are two reasons why a cell divides when it gets bigger?
17. What is the difference between a **prokaryote** and a **eukaryote**? Give examples of each.
18. The **Cell Theory** applies to what kind of cells?
19. What is the **Cell Theory**? (List the three main points)
20. What is meant by **isotonic**, **hypotonic**, and **hypertonic**?
21. What factors affect the rate of **photosynthesis** (name three)
22. What cell **organelle** is responsible by making **proteins**?
23. What **organelle** is responsible for **packaging proteins**?

24. What is the name of the structure to the right?
- a. What is the name of the structure "A"?
- b. What is the name of structure "B"?



25. What does the diagram below represent? What stages are represented by each letter in the diagram?

- A-
- B-
- C-
- D-



26. Why are **viruses** not considered to be living things?

27. What does **selectively permeable** mean when we are talking about a cell membrane?

28. **Cancer** cells form masses of cells called?

29. Which organelle converts food into energy that the cell uses for growth, development, and movement?

30. Which cell structure contains the cell's genetic material and controls the cell's activities?

31. Label the diagram below showing whether the solutions are isotonic, hypertonic or hypotonic

A-

B-

C-

D-

