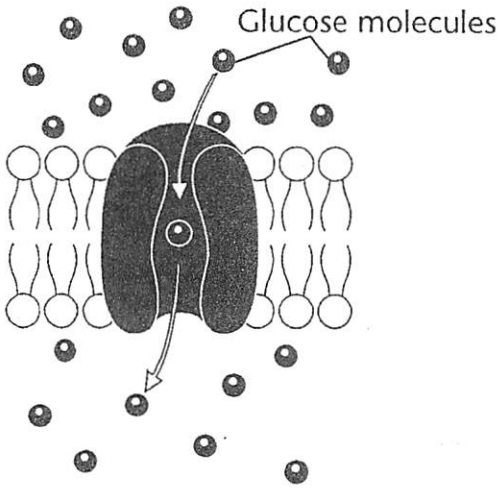
Name_____ Class_____ Date_____

Facilitated Diffusion and Active Transport

Facilitated diffusion occurs when a substance diffuses across the cell membrane through a protein channel. Active transport occurs when the cell uses energy to carry a substance across the cell membrane.

Look at the diagrams. Label each as either facilitated diffusion *or* active transport.

_____



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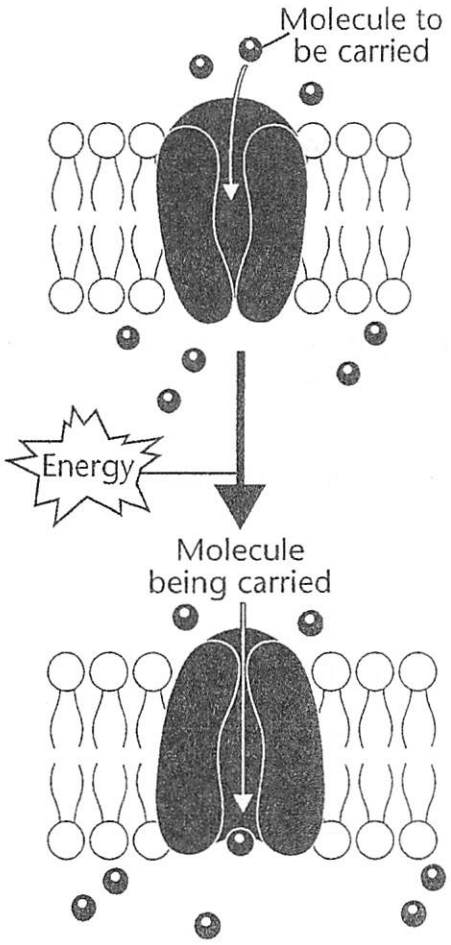

Use the diagram to answer the questions.

1. Which process can move molecules from a lower concentration solution on one side of the membrane to a higher concentration solution on the other side?

_____

2. Which process does not require energy?

_____

Name _____ Class _____ Date _____

Reviewing Key Concepts

Short Answer *On the lines provided, answer the following questions.*

1. What are two functions of the cell membrane?

_____

_____

_____

2. What happens to a higher concentration of dissolved molecules on one side of a cell membrane during the process of diffusion?

_____

_____

3. What is osmosis?

_____

_____

Completion *On the lines provided, complete the following sentences.*

4. During the process of _____, a molecule such as glucose must use a protein channel to cross through a cell membrane.
5. For a molecule to move from an area of low concentration to high concentration, the process of _____ must occur.

Reviewing Key Skills

Interpreting Graphics *On the lines provided, identify each diagram as showing an* isotonic, *a* hypotonic, *or a* hypertonic *solution inside the cell and describe how the concentration of water molecules will affect the shape of the cell.*

6. _____

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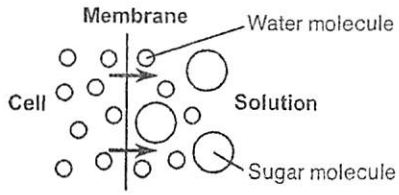

7. _____

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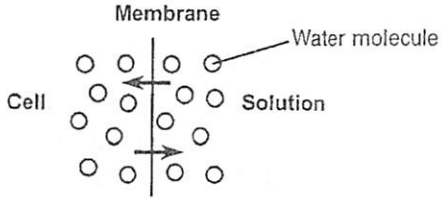

8. _____

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