Name _____ Warm-Up Date _____

HSA Prep - Cell Membrane

Use the exhibit to answer the questions number 1 to 5.

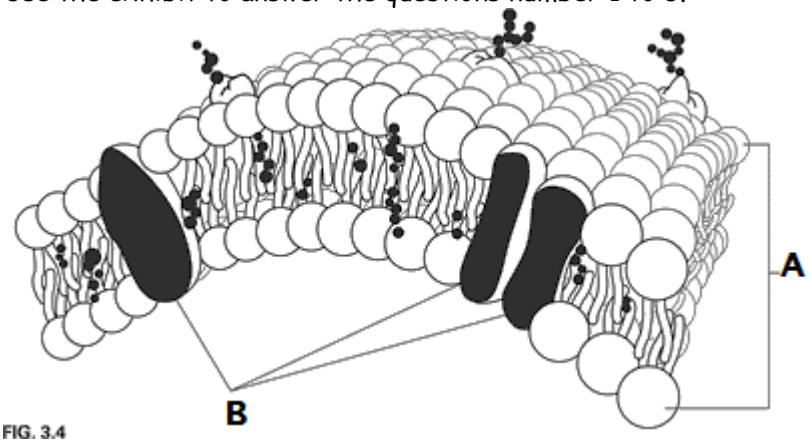


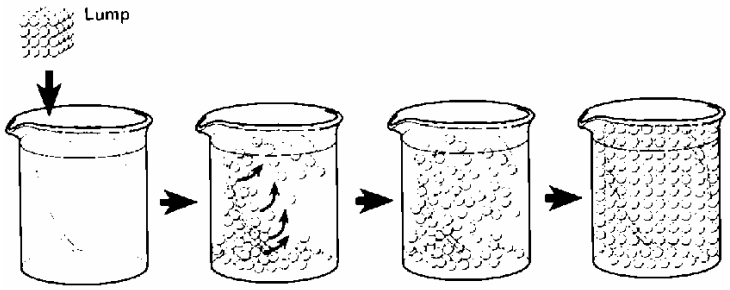
FIG. 3.4

1. What is the term for the molecules located in part *A* of the diagram?
   A) protein
   B) phospholipid
   C) cholesterol
   D) glycerol
2. Which word best describes the structure of the cell membrane?
   A) layered
   B) rigid
   C) impermeable
   D) nonpolar
3. Describe the arrangement of the molecules located in part *A* of the diagram.
   A) a polar head and a nonpolar tail
   B) a nonpolar head and a polar tail
   C) a polar head and tail
   D) a nonpolar head and tail
4. Refer to the illustration above. The structure labeled ***B*** is a(n)
   A) cell-surface marker.
   B) receptor protein.
   C) enzyme.
   D) transport protein.
5. What cell structure is shown in the diagram?
   A) cell wall
   B) cell membrane
   C) Golgi body
   D) endoplamic reticulum
6. Which model did scientists develop to describe the cell membrane?
   A) phospholipid model
   B) dynamic model
   C) fluid mosaic model
   D) transport model
7. Which phrase best describes the property of selective permeability?
   A) some molecules pass
   B) all ions pass
   C) large molecules pass
   D) all molecules pass
8. A ligand produces a response in a cell if it finds the right kind of
   A) carbohydrate.
   B) hormone.
   C) membrane.
   D) receptor.
9. Which phrase best describes passive transport?
   A) requires transport proteins
   B) requires no energy from the cell
   C) requires an isotonic solution
   D) requires facilitation by enzymes
10. Water moves into a cell when the solution surrounding the cell is
    A) hypertonic.
    B) hypotonic.
    C) isotonic.
    D) concentrated.

11. What is the term for the diffusion of water across a semipermeable membrane?
- **A)** osmosis
- **B)** equilibrium
- **C)** transport
- **D)** isotonic

12. The movement of molecules down a concentration gradient through transport proteins in the cell membrane is a type of
- **A)** selective transport.
- **B)** osmosis.
- **C)** energy expenditure.
- **D)** facilitated diffusion.

113. The difference in the concentration of dissolved particles from one location to another is called a
- **A)** concentration gradient.
- **B)** concentrated solution.
- **C)** saline solution.
- **D)** dynamic gradient.



14. Refer to the illustration above. The process shown is called
- **A)** osmosis.
- **B)** facilitated diffusion.
- **C)** active transport.
- **D)** diffusion.

15. Diffusion is the movement of a substance
- **A)** only through a lipid bilayer membrane.
- **B)** from an area of low concentration to an area of higher concentration.
- **C)** only in liquids.
- **D)** from an area of high concentration to an area of lower concentration.

16. The dispersal of ink in a beaker of water is an example of
- **A)** diffusion.
- **B)** osmosis.
- **C)** active transport.
- **D)** endocytosis.