Name: _____ Group: _____ Date: _____

Diffusion

STUDENT BOOK	p. 175

1. Which of the following statements matches the definition of diffusion?

a) Diffusion is the movement of a solute from the most concentrated area toward the least concentrated area. ☐

b) Diffusion is the movement of a solute from the least concentrated area toward the most concentrated area. ☐

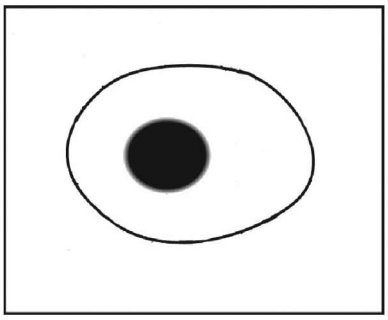
c) Diffusion is the movement of a solvent from the most concentrated area toward the least concentrated area. ☐

d) Diffusion is the movement of a solvent from the least concentrated area toward the most concentrated area. ☐

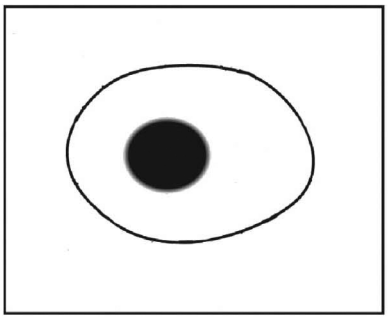
2. Illustrate particle diffusion through a cell membrane by using the legend to complete the diagrams. (There are two possibilities depending on whether the cell or the outside milieu is the most highly concentrated.)

PARTICLE DIFFUSION THROUGH A CELL MEMBRANE

a)



b)



LEGEND : **Most concentrated area** **Least concentrated area** **Mouvement of solute**

3. When blood reaches the lungs:

a) The concentration of oxygen is lower than that in the lungs. In which direction will oxygen diffuse: from the blood to the lungs or from the lungs to the blood?

_____

b) The concentration of carbon dioxide is higher than that in the lungs. In what direction will carbon dioxide diffuse: from the blood to the lungs or from the lungs to the blood?

_____