

LATG - Quiz #3 (Ch. 6, 7)

1. _____ is a form of diffusion that occurs in the presence of a semi-permeable membrane and involves the movement of molecules from a high concentration to a low concentration.
 - a. Tonicity
 - b. Osmosis
 - c. Passive transport
 - d. Active transport

2. What is the main difference between facilitated diffusion and active transport?
 - a. Facilitated diffusion requires a carrier substance and active transport never uses a carrier substance
 - b. Active transport requires energy usage by the cell
 - c. Facilitated diffusion requires energy usage by the cell
 - d. Active transport is known as carrier-mediated diffusion

3. Which of the following is an important active transport system that exists in all cells?
 - a. Sodium-potassium pump
 - b. Chloride-hydrogen pump
 - c. H₂O pump
 - d. Sodium-Hydrogen pump

4. What organelles generate the majority of the energy needed by cells to carry out their functions?
 - a. Centrioles
 - b. Mitochondria
 - c. Golgi apparatus
 - d. Endoplasmic reticulum

5. What type of tissue are chondrocytes?
 - a. Epithelium
 - b. Muscle
 - c. Nerve
 - d. Connective

6. What type of cell is a histiocyte?
 - a. Lymphocyte
 - b. Macrophage
 - c. Neutrophil
 - d. Eosinophil

7. If you were asked to administer an isotonic solution to an animal patient, you might _____.
- a. administer 5.0% sodium chloride solution
 - b. administer 20% sodium chloride solution
 - c. administer 0.9% sodium chloride solution
 - d. administer 0.1% sodium chloride solution
8. Usually DNA and RNA are similar in that their basic structural unit is a(n) _____ but differ in that _____ is _____ and _____ is single stranded.
- a. nitrogenous base; RNA; double stranded; DNA
 - b. nucleotide; DNA; double stranded; RNA
 - c. ribose sugar; RNA; single stranded and DNA
 - d. amino acid; DNA; double stranded; RNA
9. Protective keratinized epithelium would most likely be found _____.
- a. in the urethra
 - b. lining the liver and bile ducts
 - c. in the lining of the lungs
 - d. as a component of the skin
10. Skeletal muscle and cardiac muscle have the same contractile mechanisms but _____ contracts _____ and _____ contracts involuntarily.
- a. skeletal muscle; voluntarily; cardiac muscle
 - b. cardiac muscle; involuntarily; skeletal muscle
 - c. skeletal muscle; involuntarily; cardiac muscle
 - d. cardiac muscle; voluntarily; skeletal muscle