

Cell Structure and Membrane Transport Quiz

Chapter 7

Key words

Prokaryotic	hypo, iso, and hypertonic
Eukaryotic	endocytosis
Passive transport	- phagocytosis
Active transport	- pinocytosis
Osmosis	exocytosis
Diffusion	vesicle
Facilitated diffusion	any terms from your membrane structure tutorial questions
Plasmolysis	(especially hydrophilic, hydrophobic, amphipathic,)
Turgor pressure	
Phospholipids	
Glycoprotein	
Integral membrane protein	
Peripheral membrane protein	

Objectives:

- 1) List the three components of the cell theory
- 2) List the differences and similarities between prokaryotic and eukaryotic cells
- 3) List the differences between plant and animal cells
- 4) Review the functions of the cellular organelles you studied for your organelle quiz
- 5) Know and understand the basic components and structure of the cell membrane (study your membrane structure tutorial – focus on questions 1,3, 4-6, 14c, 14d, 15-18).
- 6) Explain the processes of **passive** and **active transport** and know **examples of each**
- 7) Explain the difference between *hypotonic*, *hypertonic* and *isotonic* solutions. Describe what will happen to both an animal cell and a plant cell that is placed in these types of solutions (use the words plasmolysis and turgor pressure when talking about plant cells)
- 8) Explain what turgor pressure is and why it is important to plants
- 9) Explain the difference between exocytosis and endocytosis and why they are sometimes necessary to move substances across the plasma membrane
- 10) What is the reason for channel proteins (such as those used for facilitated diffusion or active transport)? What types of molecules (referring to their chemical nature) go through these channels? (HINT: Why couldn't these molecules simply diffuse through the lipid bilayer instead?)