

Chapter 5 Keys to Success

If you can demonstrate understanding regarding the following questions, you will be successful with this chapter:

What is the purpose of membranes surrounding cells and within cells?

What are the three main components in a cell membrane? What are their functions?

Why does a cell have glycoproteins and glycolipids?

What are the six classes of proteins found in membranes and what do they do?

What is signal transduction?

Membranes are selectively permeable. What can and what cannot freely pass?

How are very large substances brought into and pushed out of cells?

What are the components of a solution?

How does diffusion work?

What is osmosis and what role do solutes play in this type of transport?

What is the meaning of isotonic, hypertonic and hypotonic solutions? How would cells react with each of these?

How does facilitated transport work and why is it necessary as opposed to simple diffusion?

When would active transport be necessary?

How does the sodium-potassium pump work?

What are the three types of endocytosis?

Collagen and elastin are found in the extra cellular matrix. What are each of their jobs?

What are the types and functions of the three major cell junctions?

How do adjacent plant cells share nutrients?