

Unit 3 – Ch. 7 Cell Structure & Function Test Objectives (pgs 182-211)

- Summarize the 3 principles of the cell theory.
- Identify the scientists (Hooke, Van Leeuwenhoek, Schleiden, Schwann, Virchow) that contributed to the cell theory.
- Name one advantage electron microscopes have over compound light microscopes.
- Compare and contrast prokaryotic cell and a eukaryotic cell.
- Compare and contrast plant and animal cells.
- Identify and explain the structures and functions of cell organelles.
- Label cell organelles on both plant and animal cell pictures.
- Summarize how the plasma membrane helps maintain homeostasis for the cell.
- Compare and contrast active and passive transport.
- Identify examples of active and passive transport.
- Draw pictures of cells in isotonic, hypotonic, and hypertonic solutions and explain which direction the water & solutes move and explain what happens to the size of the cell.

Practice Questions to Help with Short Answer:

Compare and contrast passive and active transport? Provide an example of each type of transport in your response.

Passive Transport	Both	Active Transport
<ul style="list-style-type: none"> • • <p>Example</p>	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • <p>Example</p>

Compare and contrast between prokaryotic and eukaryotic cells. Identify an example of each type of cell.

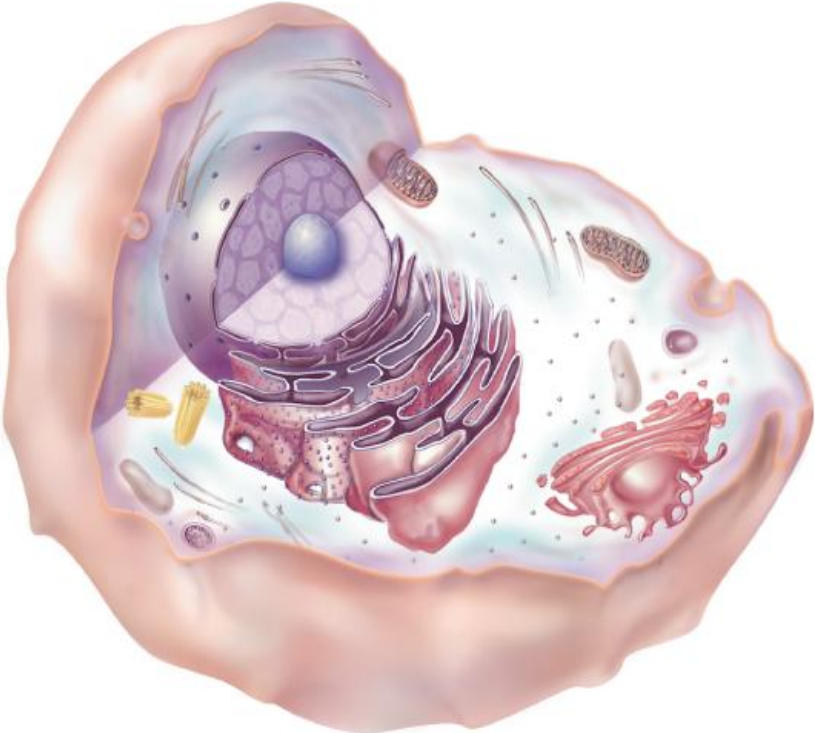
Prokaryotic	Both	Eukaryotic
<ul style="list-style-type: none"> • • • • <p data-bbox="186 772 295 804">Example</p>	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • • • <p data-bbox="1031 772 1140 804">Example</p>

Compare and contrast plant and animal cells.

Plant	Both	Animal
<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • • • • 	<ul style="list-style-type: none"> • • •

Draw and explain how a cell would change in isotonic, hypotonic, and hypertonic solutions.

Identify and label as many animal cell structures as you can below.



Identify and label as many plant cell structures as you can below.

