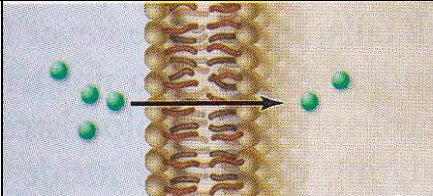
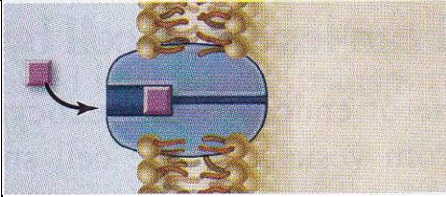
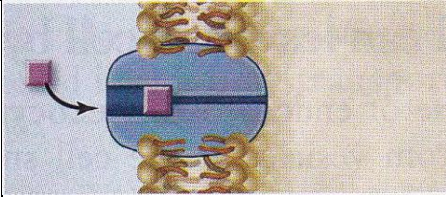


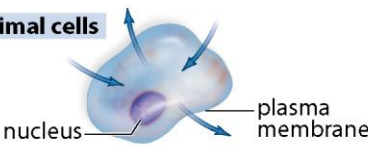
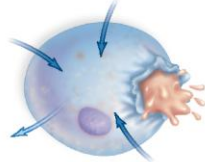
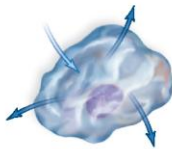
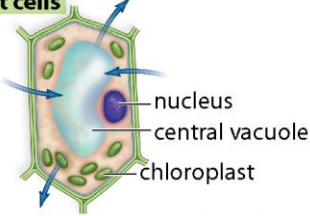
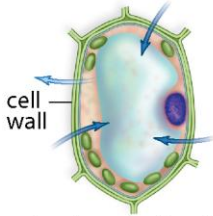
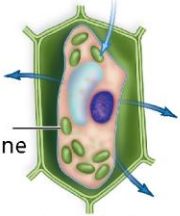
SBI4U	<h1 style="margin: 0;">Cellular Transport</h1>
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Process	How It Works	Example
<b>PASSIVE PROCESSES</b>		
<b>DIFFUSION</b>		
Diffusion		Movement of oxygen into cells
<b>FACILITATED DIFFUSION</b>		
Protein channel		
<b>OSMOSIS</b>		
	ISOTONIC	HYPOTONIC
		HYPERTONIC

<b>DIFFUSION</b>		
Diffusion		Movement of oxygen into cells

<b>FACILITATED DIFFUSION</b>		
Protein channel		

<b>OSMOSIS</b>		
	ISOTONIC	HYPOTONIC
		HYPERTONIC

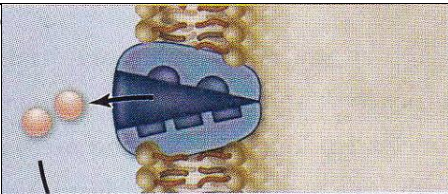
<p><b>Animal cells</b></p>  <p>In an isotonic solution, there is no net movement of water.</p>	 <p>In a hypotonic solution, water enters the cell, which may burst (lysis).</p>	 <p>In a hypertonic solution, water leaves the cell, which shrivels (crenation).</p>
<p><b>Plant cells</b></p>  <p>In an isotonic solution, there is no net movement of water.</p>	 <p>In a hypotonic solution, the central vacuole fills with water, turgor pressure develops, and chloroplasts are seen next to the cell wall.</p>	 <p>In a hypertonic solution, the central vacuole loses water, the cytoplasm shrinks (plasmolysis), and chloroplasts are seen in the center of the cell.</p>

# ACTIVE PROCESSES

## ACTIVE TRANSPORT

### Protein carrier

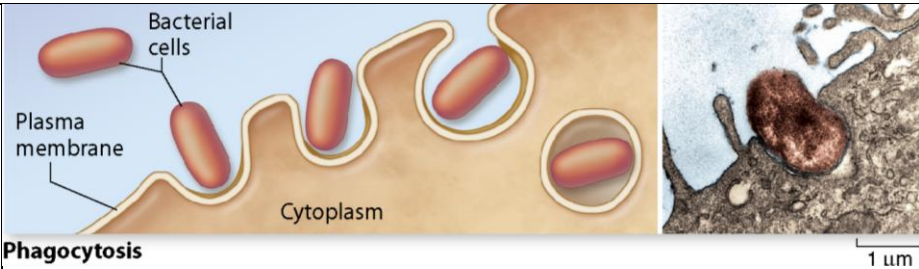
Na<sup>+</sup>/K<sup>+</sup> pump



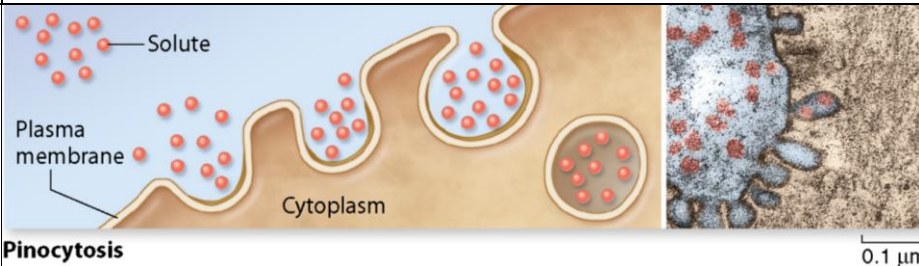
## ENDOCYTOSIS

### Membrane vesicle

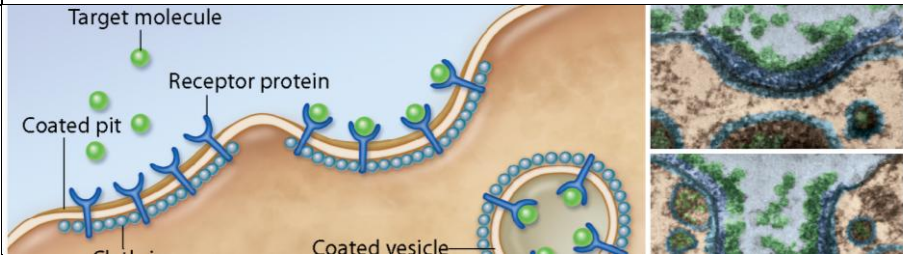
Phagocytosis



Pinocytosis

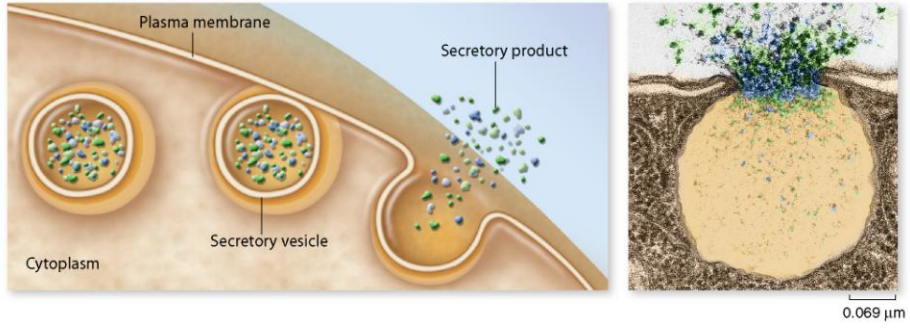


Receptor-mediated endocytosis



# EXOCYTOSIS

Membrane vesicle



# VOCABULARY

WORD	DEFINITION & EXAMPLES
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## PASSIVE PROCESSES

### DIFFUSION

Passive transport	
Diffusion	
Concentration gradient	

### FACILITATED DIFFUSION

Facilitated diffusion	
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### OSMOSIS

Osmosis	
Solute	
Solvent	
Semi-permeable	
<b>hypertonic</b>	
<b>hypotonic</b>	
<b>isotonic</b>	

## ACTIVE PROCESSES

Active transport and ATP	
Sodium-potassium pump	

### ENDOCYTOSIS

Endocytosis	
Phagocytosis	
Pintocytosis	
Receptor-mediated endocytosis	

### EXOCYTOSIS

Exocytosis	
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