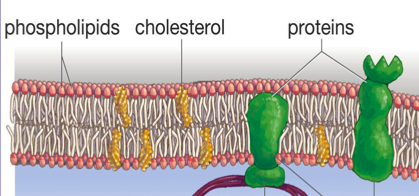
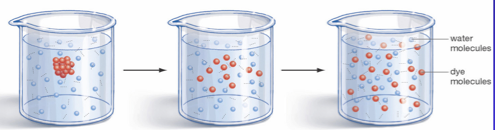
Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_Hour\_\_\_\_\_\_

Membrane Transport

1. The Cell Membrane (aka: the PLASMA membrane)
2. What does it do?
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Maintains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: controls what \_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_the cell
   1. Hormones, food, waste, etc
5. What is it made of?
6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Types of Transport across the Cell Membrane
   * 1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Transport**

Movement of substances across a cell membrane:

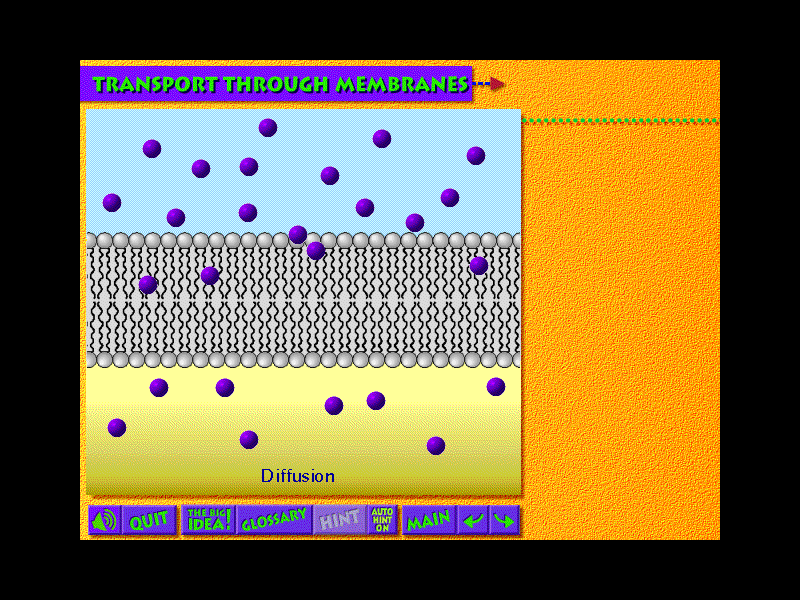
* From \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_ amounts (concentrations)
* Uses \_\_\_\_\_\_\_\_\_\_ energy



* + - 1. **DIFFUSION**
* Requires \_\_\_\_\_\_\_ energy
* Gasses and small molecules move from an area of \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_ amounts (concentrations)

CHECK FOR UNDERSTANDING:

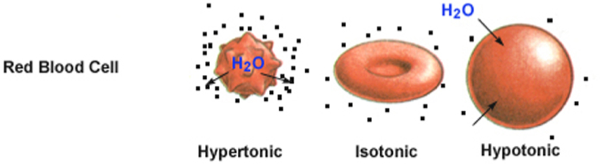
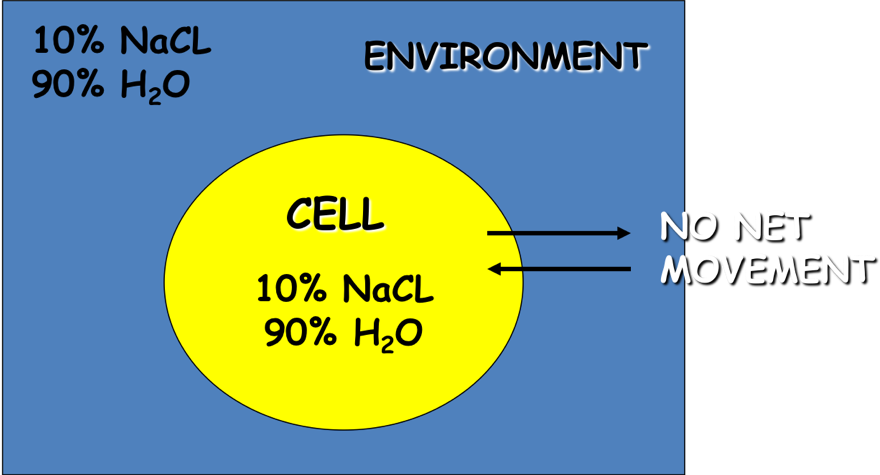
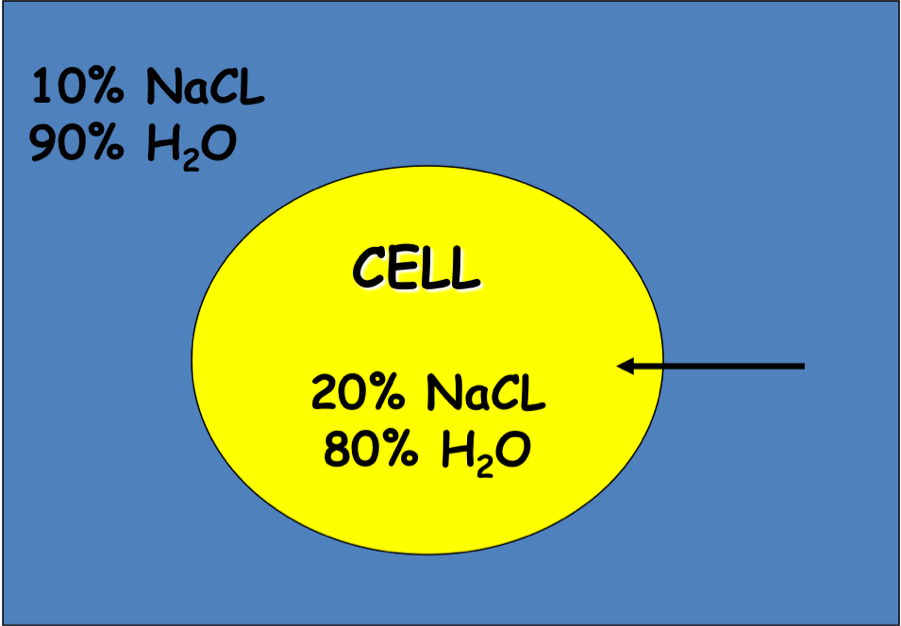
Diffusion of oxygen through the cell membrane. How will the oxygen move?

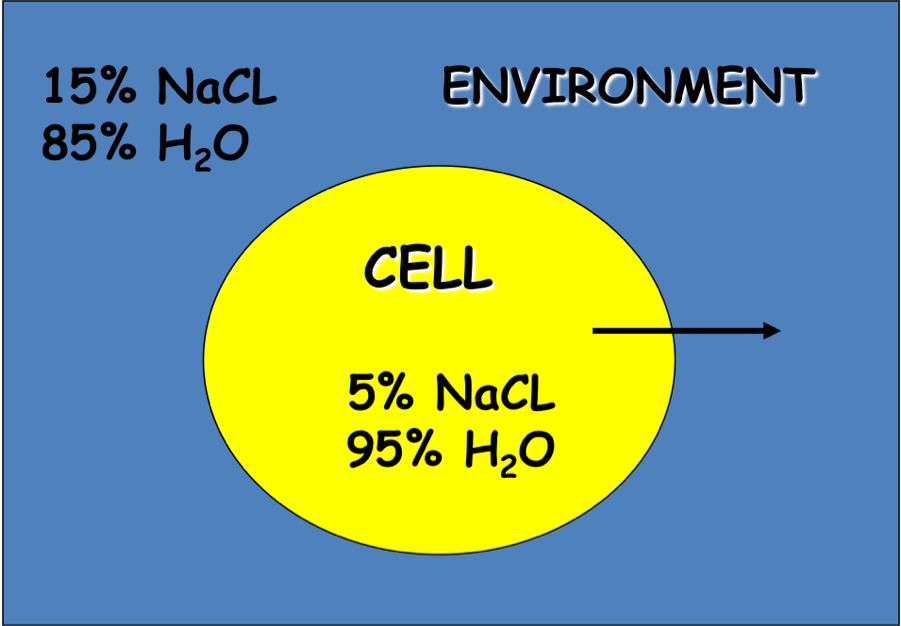


a. b. OUTSIDE THE CELL

c.

INSIDE THE CELL

* + - 1. **OSMOSIS**
* Movement of \_\_\_\_\_\_\_\_\_\_\_\_ across a cell membrane
* Moves from \_\_\_\_\_\_\_\_\_\_\_\_ water amount (low solute) to a \_\_\_\_\_\_\_\_\_\_ water amount (high solute)
  + - * 1. **ISOTONIC SOLUTION**
* Amount of water is \_\_\_\_\_\_\_\_\_\_\_\_ inside and outside of cell
* The cell will\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  1. **HYPOTONIC SOLUTION**
* More water \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell
* More solute \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell
* The cell will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



* 1. **HYPERTONIC SOLUTION**
* More water \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell
* More solute \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell
* The cell will \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

CHECK FOR UNDERSTANDING

CELL A

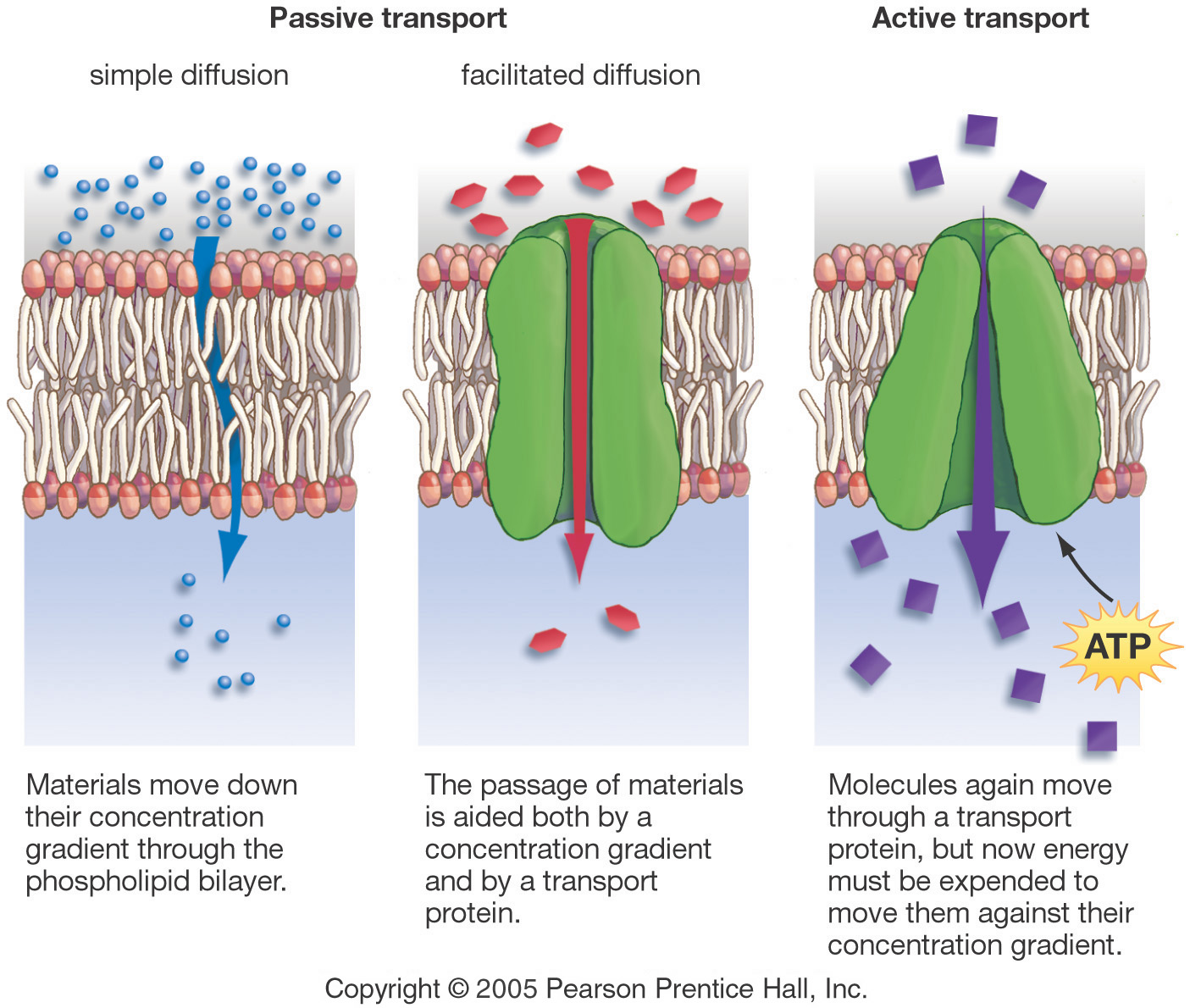
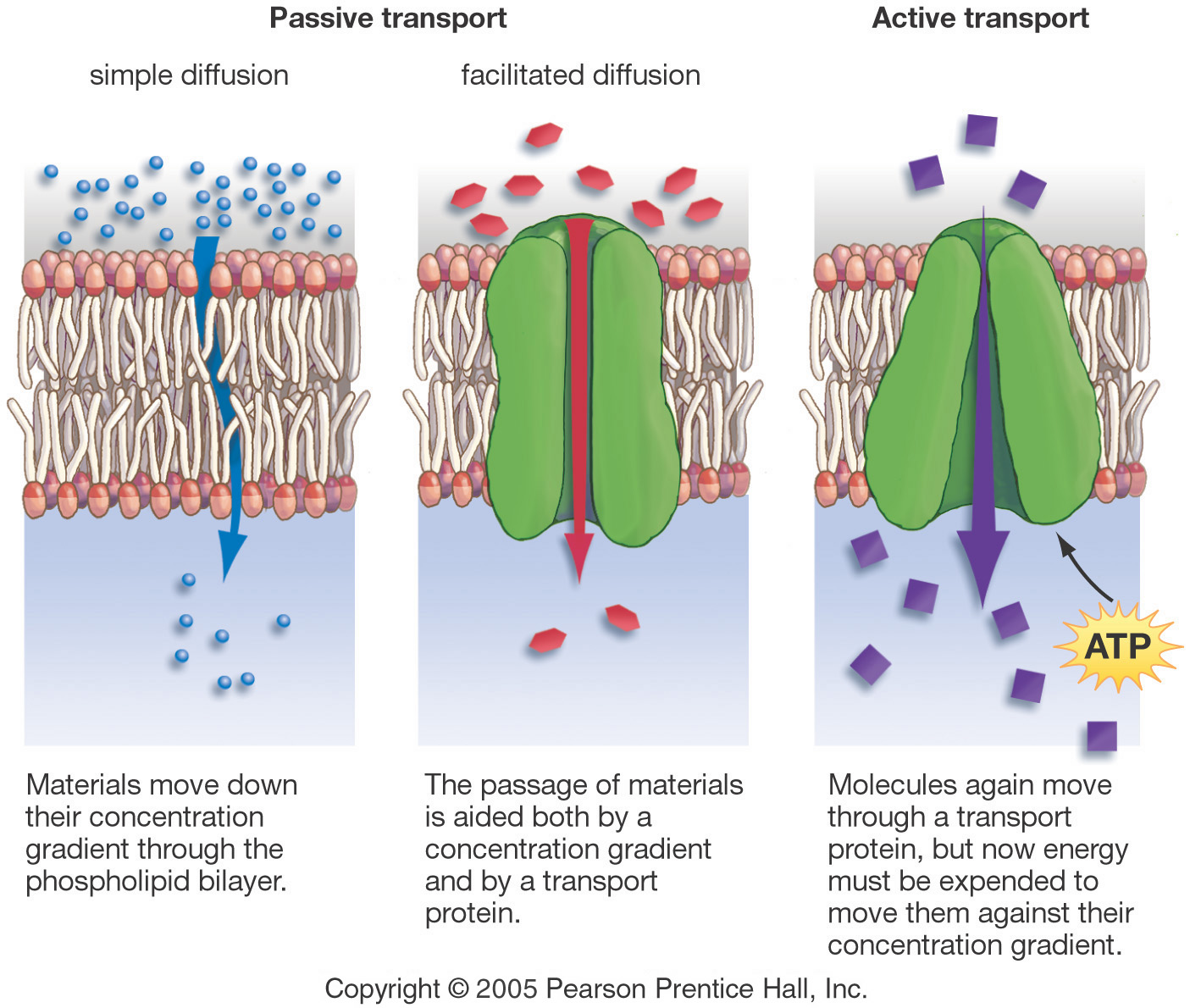
= **SOLUTE**

**W = WATER**

W W W What type of solution is Cell A in? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

W W What will happen to cell A? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

W W W

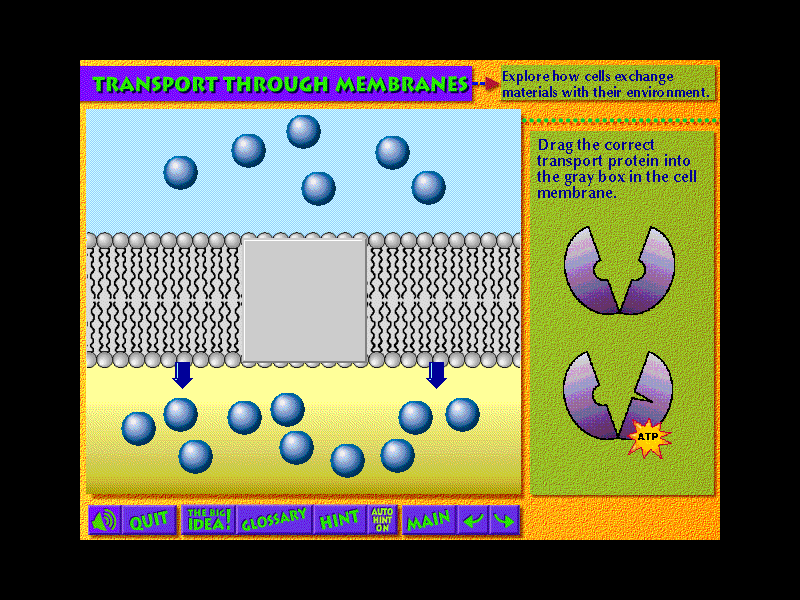


3. **FACILITATED DIFFUSION**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ require energy
* Uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to move from an area of \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_ amounts (concentrations)
  + Examples: Glucose or amino acids moving from blood into a cell

**B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TRANSPORT**

* Requires \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or ATP
* Moves materials from \_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_ amounts (concentrations)



**B.**

**A.**

CHECK FOR UNDERSTANDING

Which carrier protein would be used in this situation to get the solute across the membrane? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What type of transport is this? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **BULK MOVEMENT**

* Movement of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ molecules
* Requires \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + - 1. **EXOCYTOSIS**- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
      2. **ENDOCYTOSIS**- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_