

Name: \_\_\_\_\_

## Cell Transport and Cell Energy Review

### CELL TRANSPORT

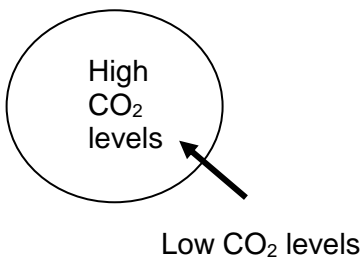
1. Define **Homeostasis**:

Match the term with its correct description:

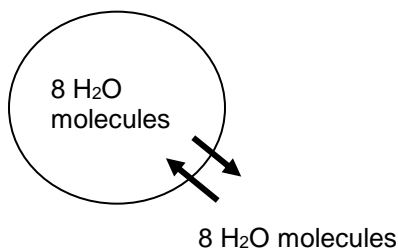
- |                          |                     |
|--------------------------|---------------------|
| a. energy                | e. active transport |
| b. facilitated diffusion | f. exocytosis       |
| c. equilibrium           | g. osmosis          |
| d. simple diffusion      | h. endocytosis      |

- \_\_\_\_\_ Is used during active transport but not passive transport
- \_\_\_\_\_ A portion of the cell membrane pinches to form a vesicle and bring large molecules into the cell
- \_\_\_\_\_ Particle movement from an area of higher concentration to an area of lower concentration
- \_\_\_\_\_ Process by which a cell **expels** wastes from a vesicle that fuses with the cell membrane
- \_\_\_\_\_ A form of passive transport that uses transport proteins to form channels in the membrane
- \_\_\_\_\_ Particle movement from an area of lower concentration to an area of higher concentration
- \_\_\_\_\_ The diffusion of water through a cell membrane
- \_\_\_\_\_ When the molecules of one substance are spread evenly throughout another substance to become balanced

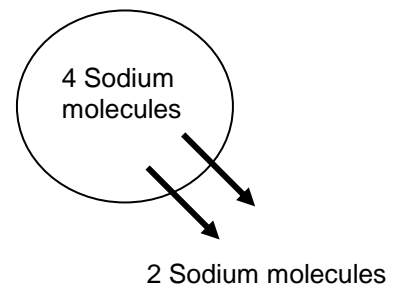
Label the diagrams of cells using the following terms: **diffusion**, **active transport**, **equilibrium**. The arrows show the direction of transport.



10. Label \_\_\_\_\_



11. Label \_\_\_\_\_



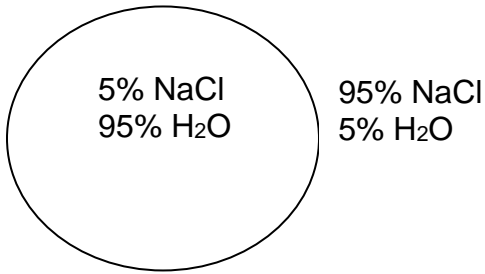
12. Label \_\_\_\_\_

13-15 FILL IN THE TABLE: Check the correct column for each statement:

Statement	Isotonic solution	Hypotonic solution	Hypertonic solution
Causes a cell to swell			
Doesn't change the shape of a cell			
Causes a cell to shrink			

Osmosis is the diffusion of water from an area of high concentration to an area of low concentration. Only water moves in osmosis! The diagrams below show the concentration of water and salt inside the cell and the concentration of water and salt surrounding the cell. Complete the sentences below by comparing the concentration of the water inside the cell and the concentration outside the cell.

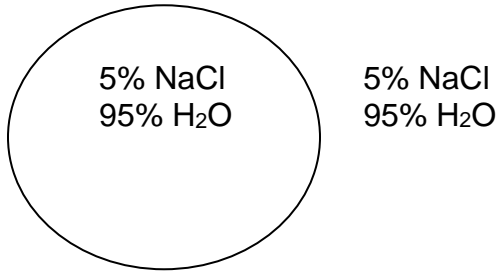
16.



a. Water will flow \_\_\_\_\_ (into the cell, out of the cell, in both directions).

b. The cell will \_\_\_\_\_ (shrink, swell, stay the same).

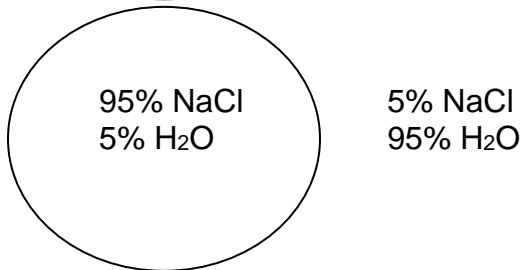
17.



a. Water will flow \_\_\_\_\_ (into the cell, out of the cell, in both directions).

b. The cell will \_\_\_\_\_ (shrink, swell, stay the same).

18.



a. Water will flow \_\_\_\_\_ (into the cell, out of the cell, in both directions).

b. The cell will \_\_\_\_\_ (shrink, swell, stay the same).

### Photosynthesis vs. Respiration

	Photosynthesis	Respiration
What is its purpose?		
What type of cells do this?		
What organelle in the cell does this?		
Reactants		
Products		

Complete the Table using the words and phrases in the box below:

- |  |                            |                            |
|--|----------------------------|----------------------------|
| • Green plant cells                          | • Chloroplast              | • Release energy from food |
| • CO <sub>2</sub> + H <sub>2</sub> O + ATP   | • Glucose + O <sub>2</sub> | • All cells                |
| • Mitochondria                               | • Capture & Store energy   | • Glucose + O <sub>2</sub> |
| • CO <sub>2</sub> + H <sub>2</sub> O + light |                            |                            |

