Science 8 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Blk: \_\_

**1.3 Notes – Diffusion, Osmosis and the Cell Membrane**

PLOs: - demonstrate knowledge of the characteristics of living things

- relate the main features and properties of cells to their functions

- use models to explain how systems operate

* Diffusion is the \_\_\_\_\_\_\_\_\_\_\_\_ of particles from an area of \_\_\_\_\_\_\_\_\_\_\_\_

concentration to an area of \_\_\_\_\_\_\_\_\_\_\_\_ concentration.

* Concentration is the \_\_\_\_\_\_\_\_\_\_\_\_ of substance in a given space.
* The smell of fresh baked bread “spreading” throughout the room is an \_\_\_\_\_\_\_\_\_\_\_\_ of diffusion.

**Diffusion and Cell Membrane**

* The cell membrane is a \_\_\_\_\_\_\_\_\_\_\_\_ permeable membrane.

- This means that it has many small \_\_\_\_\_\_\_\_\_\_\_\_ that let \_\_\_\_\_\_\_\_\_\_\_\_

substances pass through it but not others.

* One way that

substances can

move through the

cell membrane is by

\_\_\_\_\_\_\_\_\_\_\_\_.

* When the

concentration on

both sides of the

membrane is the

same, it is called

\_\_\_\_\_\_\_\_\_\_\_\_.

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**Osmosis**

* Osmosis is the \_\_\_\_\_\_\_\_\_\_\_\_ of water

\_\_\_\_\_\_\_\_\_\_\_\_ a selectively permeable

\_\_\_\_\_\_\_\_\_\_\_\_.

* Osmosis occurs when \_\_\_\_\_\_\_\_\_\_\_\_

particles move from a higher concentration to

a lower concentration.

**Osmosis and the Cell**

* Cells \_\_\_\_\_\_\_\_\_\_\_\_ water and

\_\_\_\_\_\_\_\_\_\_\_\_ this water to survive.

* \_\_\_\_\_\_\_\_\_\_\_\_ is how the cell gains and loses its needed water.

**Example 1: Equal movement of water in and out of cells**





**Example 2: More water moving into cells than is moving out**





**Example 3: More water moving out of cells than is moving in**

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