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

**TOPIC 3: Cellular Transport**

*Please use the Council Rock Video Podcast to guide you*

1. What 4 types of organisms have a cell wall?
	1.
	2.
	3.
	4.
2. Diffusion moves molecules from a \_\_\_\_\_\_\_\_ concentration to a \_\_\_\_\_\_\_\_ concentration.

1. True or false: after equilibrium is reached, molecules do not move anymore.

1. In a **hypotonic** solution, there is a low solute / high water concentration outside a cell. Water moves \_\_\_\_\_\_\_\_ the cell.
2. Circle one: Who does better in a hypotonic solution? **PLANTS ANIMALS**

1. In a **hypertonic** solution, there is a high solute / low water concentration outside a cell. Water moves \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the cell.
2. In an **isotonic** solution, there is an \_\_\_\_\_\_\_\_\_ solute / water concentration outside and inside a cell.

1. Circle one: Who does better in an isotonic solution? **PLANTS ANIMALS**

1. Facilitated diffusion needs the help of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to move large/charged molecules across a cell membrane.

1. What type of molecule is the “facilitator” in facilitated diffusion?

1. The only type of cellular transport to go AGAINST the concentration gradient is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. What important energy molecules allows active transport to happen?
2. What happens to the shape of the protein when the ATP binds to it?

1. What happens to the shape of the protein when the potassium ions bind to it?

1. In the Na+ K+ pump, \_\_\_ ions of sodium go through first. Then, \_\_\_ ions of potassium go through.