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?
2. Diffusion moves molecules form a \_\_\_\_\_\_\_\_\_\_\_\_ concentration to a \_\_\_\_\_\_\_\_\_ concentration.
3. True or false: after equilibrium is reached, molecules do not move anymore.
4. In a **hypotonic** solution, there is a low solute / high water concentration outside a cell. Water moves \_\_\_\_ the cell.
5. Circle one: Who does better in a hypotonic solution? **PLANTS ANIMALS**
6. In a **hypertonic** solution, there is a high solute / low water concentration outside a cell. Water moves \_\_\_\_\_ the cell.
7. In an **isotonic** solution, there is an \_\_\_\_\_\_\_\_\_ solute / water concentration outside and inside a cell.
8. Circle one: Who does better in an isotonic solution? **PLANTS ANIMALS**
9. Facilitated diffusion needs the help of a \_\_\_\_\_\_\_\_\_\_ to move large/charged molecules across a cell membrane.
10. What type of molecule is the “facilitator” in facilitated diffusion? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. The only type of cellular transport to go AGAINST the concentration gradient is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
12. What important energy molecules allows active transport to happen? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. What happens to the shape of the protein when the ATP binds to it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. What happens to the shape of the protein when the potassium ions bind to it? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
15. In the Na+ K+ pump, \_\_\_\_\_\_\_ ions of sodium go through first. Then, \_\_\_\_\_ ions of potassium go through.