

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?
  - a.
  - b.
  - c.
  - d.
2. Diffusion moves molecules from 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  $\text{Na}^+ \text{K}^+$  pump, \_\_\_\_\_ ions of sodium go through first. Then, \_\_\_\_\_ ions of potassium go through.