

## Review For Cell and Transport Test

- \*1. List the 3 parts to the cell theory.
2. Describe the role each of the following played in the study of cells: Hooke, von Leeuwenhoek, Schleiden, Schwann, Virchow.
3. Compare and contrast Prokaryotic and Eukaryotic cells.
4. What is the advantage of having many small cells instead of a few large cells?
5. Describe the structure and function of each of the following: smooth endoplasmic reticulum, rough endoplasmic reticulum, golgi apparatus, nucleus, nuclear membrane, nuclear pore, nucleolus, mitochondria, chloroplasts, lysosomes, cytoskeleton, ribosome, central vacuole, cell wall flagella, cytoplasm, and cilia.
- \*6. Compare and contrast plant and animal cells.
7. Define Hydrophobic and hydrophilic
8. Draw a phospholipid. Label the hydrophobic and hydrophilic parts. Draw a picture of how they are arranged in a cell membrane. What is this arrangement called?
9. Describe the 3 roles proteins play in the cell membrane.
10. What is the difference between active transport and passive transport?
11. Define diffusion. How is facilitated diffusion different from diffusion?
12. What process do cells go through to take in large particles?
13. Give an example of a prokaryote and an example of a eukaryote.
14. The salt concentration of a cell is 8%. What is the solute? What is the solvent? Is a 3% salt solution hypotonic, hypertonic, or isotonic to the cell? To reach equilibrium molecules will have to move either in or out of the cell. What molecules will move? What is this process called? What will happen to the cell?
- \*15. Explain why pouring salt on a slug kills it. What would happen if you poured distilled water on it instead?
- \*16. Label the animal and plant cell diagrams on the back.

