Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STUDY GUIDE Chapter 4 Section 1

Exchange with the Environment

Period\_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I CAN explain how materials move in and out of a cell.

* **complete this study guide,**
* **study—this study guide**

If you **do not receive a Proficient** grade on this test, in order to retake you are required to:

My child had completed this study guide, studied, and is ready to retake this test.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

parent signature

* **have your parent sign this study guide.**

1. When particles are moved through a membrane from a region of low concentration to a region

of high concentration, the process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. During \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, glucose (sugar) moves through a protein doorway without

using energy.

3. When wilted celery is soaked in water, it becomes crisp again due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is where the exchange of materials between a cell and its

environment takes place.

5. Osmosis is the diffusion of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_through a cell membrane.

6. Sugar entering a cell that already contains a high concentration of sugar would move by

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

7. When a cell membrane surrounds a particle, encloses it in a vesicle, and brings the particle

into the cell, this is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

8. When vesicles are formed at the Golgi complex and they carry particles to the cell membrane

for export (out of the cell), this is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

9. In the Diffusion Lab, the plastic baggie was selectively permeable. Explain how you

determined this.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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10. Be able to identify the diagrams #21-26 on your Cell Transport Review worksheet #23.