Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Unit 3 Topic 3

Period: \_\_\_\_\_\_\_\_\_ Page: \_\_\_\_\_\_\_\_\_

**Cellular Transport Comparison**

**Part I: PASSIVE Transport**

Complete the following table:

|  |  |  |
| --- | --- | --- |
| **Type of PASSIVE Transport** | **Description**  **(include what is being transported & how it is transported)** | **Up or Down Gradient** |
| Simple diffusion |  |  |
| Facilitated diffusion |  |  |
| Osmosis |  |  |

In passive transport, materials always move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the concentration gradient (from an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration to an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration).

**Part II: ACTIVE Transport**

Complete the following table:

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of ACTIVE transport** | | **Description**  (include what is being transported & how it is transported) | **Up or Down Gradient** |
| Molecular Pumps | |  |  |
| Exocytosis | |  |  |
| Endocytosis | Pinocytosis |  |  |
| Phago-cytosis |  |  |

In active transport, materials always move \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the concentration gradient (from an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration to an area of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ concentration).

**Part III: Writing Prompts**

Respond to the following writing prompt using complete sentences and complete paragraphs. Think about the different ways that different materials move through the cell membrane. Why does the cell membrane have different methods of transportation? Do you think that all substances move across the cell membrane at the same rate?

1. *Why do different substances move through the cell membrane in different ways and at different rates?*
2. *Explain the relationship between cell transport and homeostasis (if you cannot remember what homeostasis is, refer to your notes from the first unit when we discussed the characteristics of living things).*