**Exchange with the Environment & Cell Energy- CH 4 Sections 1 & 2**

**State Standard**

**Standard**: 7.2L.1 Explain how organelles within a cell perform cellular processes and how cells obtain the raw materials for those processes.

7.2L.2 Explain the processes by which plants and animals obtain energy and materials for growth and metabolism.

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| Learning Target | \*\*Mastery | \*Advanced | \*Meets | Approaching | Beginning |
| **I CAN** explain how materials move in &out of a cell.  **I CAN** explain cell respiration and photosynthesis. | Thoroughly explain how materials move in and out of a cell.  Thoroughly explain cell respiration and photosynthesis. | Mostly explain how materials move in and out of a cell.  Mostly explain cell respiration and photosynthesis. | Somewhat explain how materials move in and out of a cell.  Somewhat explain cell respiration and photosynthesis. | Struggling to explain how materials move in and out of a cell.  Struggling to explain cell respiration and photosynthesis. | Wasn’t able to or didn’t make an attempt to explain how materials move in and out of a cell.  Wasn’t able to or didn’t make an attempt to explain cell respiration and photosynthesis. |

The following statements are how to achieve \***Advanced** or \***Meets** for these Learning Targets:

Identify diffusion, osmosis, passive transport, active transport, exocytosis and endocytosis **from pictures and definitions.**

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**** Know the chemical formula for Carbon Dioxide, water, glucose sugar, and oxygen.

**** Be able to write the chemical equation for Cell Respiration and Photosynthesis.

To achieve \*\***MASTERY** for these Learning Targets you need to correctly answer 13 of the 15 summative assessment questions on the above checkboxes **AND** be able to correctly and thoroughly complete the checkboxes below.

**** Explain why water might move into or out of a cell.

**** Explain what “selectively permeable” means and how you determine if something is selectively permeable.

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**** Explain how the increase/decrease of energy affects cellular respiration.

**** Explain how organisms would survive in a closed ecosystem and support your answers with what we have learned about photosynthesis and cellular respiration.