**Performance Tasks:**

*Directions: Choose ONE of the following performance tasks to complete for the Photosynthesis/Cellular Respiration Unit. This will count as 30% of the Unit Assessment. Write in complete sentences and no handwritten submissions allowed. You may reference examples from class but your evidence must be new content. Include all website url’s you used in the completion of this task.*

**Option 1:** 3c

*3c: I can collect or analyze data and draw conclusions on the movement of matter and energy through living systems and how chemical elements are recombined in different ways to form different products.*

Complete the second link “Carbon Transfer through Snails and Elodia” virtual lab found here: <http://www.classzone.com/cz/books/bio_07/resources/htmls/virtual_labs/virtualLabs.html> on the document found here: <http://lhsblogs.typepad.com/files/cell-respiration-virtual-lab.pdf>

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| --- | --- | --- | --- |
| **Task** | **Met** | **Not Met** | **Scoring Criteria** |
| Completed the virtual lab and the lab document that follows it correctly and completely. |  |  | EMERGING |
|  |  | DEVELOPING |
|  |  | PROFICIENT |
|  |  | EXEMPLARY |
| **TEACHER FEEDBACK:** | STUDENT FEEDBACK: |

**Option 2:** 3c

*3c: I can collect or analyze data and draw conclusions on the movement of matter and energy through living systems and how chemical elements are recombined in different ways to form different products.*

Create an interactive model (could be digital, interpretive dance, paper cut-outs, puppetry, pastries, etc.) that shows the movement of energy or matter through both photosynthesis and cellular respiration.

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| **Task** | **Met** | **Not Met** | **Scoring Criteria** |
| Label where chemical elements are found in different levels of living systems.  |  |  | EMERGING |
| Explain the connection between photosynthesis and cellular respiration, including relevant organelles.* How much ATP is being produced in each process?
 |  |  | DEVELOPING |
| Describe how **one** of the chemical elements (carbon, hydrogen, oxygen) are recombined in different ways to form different products, either for photosynthesis OR cellular respiration. *Ex: the glucose you eat becomes the CO2 you exhale.** Includes steps of ETC and Calvin Cycle for photosynthesis

OR* Includes steps of glycolysis, Krebs Cycle, and ETC for cellular respiration
 |  |  | PROFICIENT |
| Include the full cycling of the matter and energy through multiple living organisms, not a one way path. *Ex: the glucose you eat from a plant becomes the CO2 you exhale, enters the atmosphere, is then taken in by another plant to be made into more glucose.** Includes BOTH photosynthesis and cellular respiration
 |  |  | EXEMPLARY |
| **TEACHER FEEDBACK:** | STUDENT FEEDBACK: |