**Analysis of Student Work**

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| Teacher’s Name: Kaylan Duthie | | | Assignment Title: Cellular Respiration Pre-Assessment | |
| Grade and Subject: 7th – Respiration | | Date: November 22nd | | |
| Briefly describe the **assignment**:  This was given as a formative assessment pre-test for students to identify what they already knew about cellular respiration. They were asked to check organisms that use cellular respiration and explain their reasoning | | List the **Learning Objectives**:  All organisms use cellular respiration (6-8 LS1 A) | | |
| **Part 1**: Describe **expected student responses** on the assignment that would show that the objectives are met. Include the **evaluative criteria** that will be used to determine whether a response is below, meets, or exceeds the objectives.  To exceed expectations, a student will check all of the boxes at the top of the sheet and explain that all organisms perform cellular respiration  To Meet objectives, students will check most of the boxes at top, and explain that things with cells perform cellular respiration  Under = students only check a few boxes, and say that only humans or certain types of organisms perform cellular respiration | | | | |
| **Part 2**: **Sort the student work.** Write first names below. | | | | |
| Below  Tina Parker  Laura Patrick  Kyle Kaitlin  Connor Colin  Zach Ed  Michael Kyle  Tyler Mackenzie  Anna  Brock  Archie  Jeff  Persephone  73 % of class | Meets objectives  Alecia  Nathan  Diana  Shyla  Makela  Sophie  Jim  27 % of class | | | Exceeds  \_\_\_\_\_% of class |

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| Part 3: **Take a closer look** at the student work to find incomplete understandings, misconceptions, or other student needs (including engagement or greater challenge). List those you identify with student first names for each.   * Only humans use cellular respiration (Tina, Ed) * Only things with lungs (Persephone, Parker, Kyle) * Only animals (Laura, Kyle) * Only Mammals (Connor, Parker) * Only things that need oxygen (Anna) * Anything but plants (Alecia) * Only things that move (Archie) * Only things that breath (Jeff, Persephone, Patrick, Kaitlin, Nathan, Colin) |
| Part 4: What **instructional strategies** could you use to address the issues listed above?  Students will complete a series of labs investigating the process of cellular respiration in humans, to understand that the process involves taking in oxygen and releasing carbon dioxide and heat as waste.  Students will be given a definition of cellular respiration that explains it is a process carried out by all living organisms.  Concept will be addressed through direct instruction, explaining that all cells undergo processes needed to sustain living organisms, including cellular respiration. It will also be explained through this, and the labs, that both gases can cross membranes, like those found around cells, so organisms do not have to breath to carry out this process. |
| Part 5: What **additional information** about your instruction and student understanding would you like to have? How could you collect it?  After completing a set of lesson on cellular respiration, I would give the same science probe to the students, and compare their original answers to their final answers. This would allow me to determine whether they gained an understanding of cellular respiration through the planned lessons. |