name(s) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Due Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Photosynthesis & Cellular respiration Project

**Directions:**

- Design a project that will show information about photosynthesis and cellular respiration and the *connections between the two*.

- You can show the relationship between the two in the following ways:

**Song** – at least 2 minutes long, any genre of music, lyrics typed, and song recorded with video to include images.

**Recipe** – must include all key terms, explain how to “mix” ingredients to get the final end products and include detailed images.

**Educational Video** - at least 2 minutes long, include all key terms, use demonstrations or visuals to explain information. (Think Amoeba Sisters)

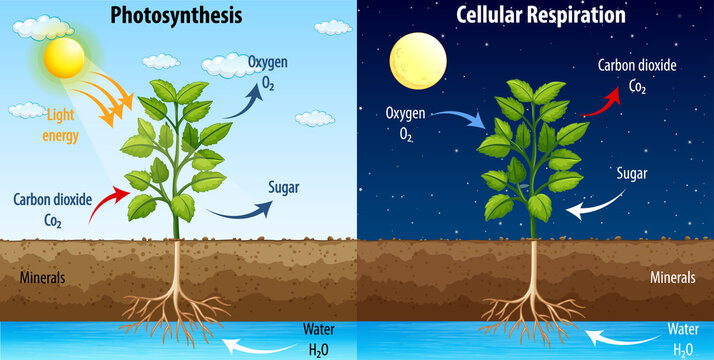
**Board game** – can be based on any game. Must include 25 cards, a board and integrated images.

**Comic book / Story**- must include at least two characters, all key terms, visually appealing, colorful, and creative.

**Infographic** – **must** be well structured and cover the topic clearly with appropriate details and examples.

- Your Project Must Contain the Following Information:

* Cell respiration equation
* Cell respiration equation in word form
* Photosynthesis equation
* Photosynthesis equation in word form
* Glycolysis
* Krebs cycle
* Electron transport chain
* Light dependent reaction
* Light independent reaction
* Glucose
* Oxygen
* Water
* Sunlight
* Carbon Dioxide
* ATP
* Artwork, drawings, or pictures that depict what is happening in photosynthesis.
* Artwork, drawings, or pictures that depict what is happening in cellular respiration.
* A WRITTEN DESCRIPTION of how photosynthesis and cellular respiration ARE RELATED



|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Photosynthesis and Cellular Respiration Project Rubric | | | | | | | |
| **Category** | **10 Points** | **8 Points** | **6 Points** | **4 Points** | **0 Points** | **Self-Assessment** | **Teacher Assessment** |
| **Use of Class Time** | Used class time well each class period. Focused on getting the project done. Never distracted others | Used class time well each class period. Usually focused on getting the project done. Never distracted others |  | There was some focus on getting the project done but occasionally distracted others | Did not use class time to focus on the project and often distracted others |  |  |
| **Items to be included** | Project includes all necessary items. All items of importance in the project are easy to find | Project is missing 1-2 items of importance. All remaining items of importance are easy to find | Project is missing 3-4 items of importance. Or items of importance are not easily found | Project is missing 5 or more items of importance and most of the items are not easily found | Poster is missing 6 or more items of importance, or they are not easily found. |  |  |
| **Explanations Included (x2)** | Project clearly explains the processes of photosynthesis and cellular respiration and how they are related. | Project clearly explains the processes of photosynthesis and cellular respiration but does not clearly explain how they are related. | Project attempts to but does not clearly explain the process of photosynthesis and cellular respiration  but does include an accurate explanation of how they are related. | Project attempts to but does not clearly explain the process of photosynthesis and cellular respiration or how they are related. | Project is missing one or more explanations of the processes of photosynthesis and cellular respiration, and fails to describe how they are related |  |  |
| **Pictures** | All pictures are related to the topic and make it easier to understand. | All pictures are related to the topic and most make it easier to understand | All pictures are vaguely related to the project | 1-2 pictures do not relate to the project | Graphics do not relate to the topic. |  |  |
| **Neatness** | The project is exceptional in terms of design, layout and neatness | The project is well done in terms of design, layout and neatness | The project is mostly well done, but a little messy in certain areas | The project is mostly messy, but is well done in one or two areas | The project is messy and unorganized |  |  |
| **Self-Assessment** | Self-assessment was completed accurately |  |  |  | Self-assessment was not completed |  |  |
| **Project turned in on time** | Project was received by the due date |  |  |  | Project is late |  |  |
| TOTAL POINTS |  |  |  |  |  | **/80** | **/80** |