

Name:

Date:

Period:

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## Biology: Cell Energy

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### Cell Energy Analogies Project

**Objective:** As a group you will build a wiki page that gives visual and written information about one of our cell energy vocabulary terms. You will also be responsible for teaching the meaning of that term to your classmates. Use the directions on this page to guide you in the creation of your cell wiki page.

Your group will be assigned one of the following concepts/processes:

*autotroph/heterotroph*

*glycolysis/glucose*

*mitochondria structure and function*

*ATP/ ADP Cycle*

*Krebs Cycle*

*Calvin Cycle (light independent*

*chloroplast structure and function*

*electron transport chain (involved in*

*reactions)/carbon fixation*

*aerobic respiration vs. anaerobic*

*cell respiration)*

*light dependent reactions*

*respiration (fermentation)*

#### Access to the wiki page:

Front page URL : <http://hjohnsonbio.pbwiki.com/>

When you are finished with your wiki page put it into the correct class period folder.

Make sure to follow all rules of etiquette, and remember your username and password here:

User name: \_\_\_\_\_

Password: \_\_\_\_\_

**Directions:** *Completely read ALL directions before taking any actions.*

- 1) Click on "example template" at the bottom of this page. This is what your final product will look like. Use this example as well as the rubric as a guide for what sort of quality and quantity of information we are looking for.
- 2) Enter in your assigned term. Enter in any synonyms, as well as any words that we use in everyday language that do not mean the same thing to clear up misunderstandings.
- 3) Enter in the textbook definition. Beneath this, write out a definition in your own words.
- 4) Find an analogy, example, real life process or object that helps explain your assigned vocabulary term.
- 5) Use google images, flkr, you tube, or teacher tube to find an image that represents your analogy or example. Video clips must be linked correctly, and may not be longer than 3 minutes.
- 6) You must provide a section on your wiki page titled "Resources" that lists the active links to websites from which you obtained information or pictures. If you got information from a textbook, magazine article, etc then you need to provide the correct MLA format for citing your resources.

- 7) Once you have completed your wiki, your group will visit the wiki of 2 additional groups in another class that have the same terms assigned to them. You will post a comment on their wiki. This comment may include constructive criticism, a complement about some aspect of their work, or a suggestion to make a content correction. When making comments, you must remember to follow the wiki etiquette!
- 8) After other students have had a chance to comment on your page, you group will have the opportunity to make any minor adjustments that may have been brought to your attention.
- 9) As a group, you will write **two** high-quality questions about your topic. These will be potential quiz questions and should be of a level of difficulty that is appropriate to a quiz. You should be asking questions that when answered correctly will demonstrate that your classmates understand your topic and learned something from your wiki/presentation.
- 10) Finally, as a group, you will present your wiki to the class. You will be considered the "experts" on your particular terms and will be expected to teach the terms to your peers. Each person in the group must play a role in the presentation.

### Teacher Evaluation:

Your page will be assessed using the rubric below:

Every member of the	6	4	2	1
<b>Fonts</b>	The fonts are consistent, easy to read and point size varies appropriately for headings and text. Use of font styles (italic, bold, underline, etc.) is used and improves readability.	The fonts are consistent, easy to read and point size varies appropriately for headings and text.	The fonts are consistent and point size varies appropriately for headings and text.	A wide variety of fonts, styles and point sizes was used.
<b>Graphics</b>	Two graphics are included one is an actual picture of the cell and the other has labeled organelles. Both are an appropriate size, and enhance reader interest or understanding.	Two graphics are included one is an actual picture of the cell and the other has labeled organelles. The pictures are not an appropriate size, but do enhance understanding.	Two graphics are included but do not enhance the understanding or interest of the reader.	Graphics seem randomly chosen, distract the reader, or do not appropriately represent the cell.
<b>Template</b>	The cell project layout was set up according to the template. It is easy to locate all important elements. Graphic elements and/or alignment are used effectively to organize material.	The cell project page was set up according to the template. It is easy to locate all important elements.	The cell project page has a usable layout, but was not done using the template. It is easy to locate most of the important elements.	The cell project page is cluttered looking or confusing. It is often difficult to locate important elements.
<b>Content Accuracy</b>	All information provided by the group on the wiki page is accurate and all the required categories of the assignment have been met.	Almost all the information provided by the group on the wiki page is accurate and all required categories of the assignment have been met.	Almost all of the information provided by the group on the wiki page is accurate and almost all of the requirements have been met.	There are several inaccuracies in the content provided by the group OR many of the requirements were not met.
<b>Spelling and Grammar</b>	There are no errors in spelling, punctuation or grammar in the final draft of the wiki page.	There are 1-3 errors in spelling, punctuation or grammar in the final draft of the wiki page.	There are 4-5 errors in spelling, punctuation or grammar in the final draft of the wiki page.	There are more than 5 errors in spelling, punctuation or grammar in the final draft of the wiki page.
<b>Quiz Questions</b>	The group has an exceptional understanding of the material and demonstrates that by writing 2 quality quiz questions related to the main concept.	The group has good understanding of the material and demonstrates that by writing 2 quiz questions, at least one of which is of high quality.	The group demonstrates gaps in their understanding of the material and demonstrates that by writing 2 quiz questions that are low quality.	The group does not understand the material and demonstrates this because of poorly written or incorrect quiz questions. (Or no questions at all)
<b>Group Presentations</b>	Every member of the group participates. Presentations are well organized, voices are loud and clear. As audience members, the group is respectful and listens attentively.	Every member of the group participates. Presentations are well organized, some members voices are not clear. As audience members, the majority of the group is respectful and listens attentively.	Most members of the group participate. Presentations are lacking some organization and voices are not clear. OR As audience members, the group is not listening attentively.	Some members of the group participate. Presentations lack any form of organization and are difficult to hear. OR As audience members, members of the group are disruptive.