| Day of Week | Date | Skill | Plan |
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| M | 09/22/14 | Unit 1: The Cell & Cellular Movement<br>Bio 4.1.1 Compare the structures and functions of the major biological molecules (carbohydrates, lipids, proteins and nucleic acids) as related to the survival of the living organisms. | Opening: few mins to answer any questions and review [5min]<br>Test: Cell & Membrane Transport<br>Read articles while awaiting others to finish.<br>Formative Assess: Sequoia Tree Probe -Human Histogram of results<br>Photosynthesis Rap: http://www.teachertube.com/viewVideo.php?video_id=62625 Begin toDiscuss: Photosynthesis: equation- reactants & products, light, leaf structure-pigments & chloroplasts autotrophs vs heterotrophs, ATP, scientists H- light & dark cycles Interactive: in groups members take turns to complete photosynthesis equation together Leaf 3D learning tool- color/label for homework begin putting together in class. Leaf interactive: http://www.curriculumbits.com/prodimages/details/biology/structure-of-a-leaf.html |
| T | 09/23/14 | Essential & Unit 2 ?s, Cont. each day<br>Unit 2 questions:<br>How are the structure of mitochondria and chloroplast directly related to their function?<br>Which organelle is involved in photosynthesis?<br>Cellular respiration?<br>What is the purpose/structure of ATP?<br>What is fermentation? | Opening: Photosynthesis Leaf Thinking Map w/equation [Photosynthesis word bank for REG]<br>Photosynthesis Rap: http://www.teachertube.com/viewVideo.php?video_id=62625<br>Post assessment: re-evaluate your thoughts of Sequoia opening- - Where & how do plants obtain their energy.<br>Discuss, continued: Photosynthesis: autotrophs vs heterotrophs, ATP, scientists, H- light & dark cycles Computer interactive: http://www.glencoe.com/sites/common_assets/science/virtual_labs/LS12/LS12.html<br>Photosynthesis quick Lab: Lab: Leaf Pigment Chromatography [look at SAV lab if could find] |

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| W | 09/24/14 | **Essential & Unit ?, Cont. each day**<br><br>**<u>Unit questions:</u>**<br>***I will understand the components required for photosynthesis and cellular respiration. I will be able to compare and contrast the two processes.**<br>**I can distinguish between aerobic and anaerobic respiration and know which process produces the most energy. I will understand fermentation.** | *Opening: Review Photosynthesis Notes*<br>*Quiz: Photosynthesis Material through 9/23*<br>*Discuss, continued: Photosynthesis: scientists, H- light & dark cycles*<br>*Flow map - H-Diagram Light and Dark rxns* |
| H | 09/25/14 | **Essential & Unit ?, Cont. each day** | Opening: Photosynthesis & Respiration Rap by students http://www.youtube.com/watch?v=4CK4z4MDXuE<br>Discuss: Cellular Respiration- 3 phases: glycolysis, Krebs Cycle, ElecTrans Chain<br>- equation<br>- where & how occurs<br>- aerobic vs anaerobic<br>Food for Thought: Can you explain the statement "Organisms are the greatest recyclers"?<br>Compare/Contrast Flow map- of above. -H work in groups to develop R work as class ]<br>CW to HW: REG - Cellular Respiration sheet H- Complete the Cell Respiration Fact Sheet AND Bioenergetics sheet.<br>Leaf Chads to show photosynthesis/cellular reproduction.<br><br>EXTRA: Practice sheet "Photosynthesis and Cell Respiration"<br>"Comparison Chart" |

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| F 09/26/14 | **Essential & Unit ?, Cont. each day** | Opening: H- Read Leaf Chad Lab. Reg read<br>Quiz: Cell Respiration<br>Discuss: Fermentation – Lactic Acid & Alcoholic<br>Yeast Fermentation Lab<br>H-Leaf Chads lab/demo, *depending on time,* to show photosynthesis/cellular reproduction.<br>Discuss lab Reg- Prepare Study Guide for Monday Test Formative Assessment |

EXTRA

EXTRA:

Objectives

Bio 4.2.1 Analyze photosynthesis and cellular respiration in terms of how energy is stored, released and transferred within and between these systems.

Bio 4.2.2 Explain ways that organisms use release energy for maintaining homeostasis.

Curricular Framing ? Can you explain the statement "Organisms are the greatest recyclers"?

**I will . . .**

I will understand the components required for photosynthesis and cellular respiration.
I will be able to compare and contrast the two processes.
I can distinguish between the chemical equations for the two processes.
I will understand the factors affecting the rate of photosynthesis.
I can distinguish between aerobic and anaerobic respiration and know which process produces the most energy.

Unit ?'s

What is ATP and what is its purpose in the cell?
What is the purpose of cellular respiration?

What is the purpose of photosynthesis?
How do photosynthesis and cellular respiration compare?

Content Q's

How do you define:
Pigment, aerobic, anaerobic, alcoholic fermentation, lactic acid fermentation?