**Biology STAAR Review Stations**

**Day 9**

**Category # 4 Biological Processes and Systems (9.B, 9.C, 11.A)**

9.B compare the reactants and products of photosynthesis and cellular respiration in terms of energy and matter

9.C identify and investigate the role of enzymes

11.A describe the role of internal feedback mechanisms in the maintenance of homeostasis

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| --- | --- | --- | --- |
|  | **9.B** | **9.C** | **11.A** |
| **Interactive Quizzes** | **Photosynthesis and Respiration**  <http://www.proprofs.com/quiz-school/story.php?title=photosynthesis-respiration-block-3-group-4> | **Enzyme Quiz**  <http://www.biologycorner.com/quiz/qz_enzymes.html> | **Homeostasis**  [**http://www.spolem.co.uk/hotpots/homeo.htm**](http://www.spolem.co.uk/hotpots/homeo.htm) |
| **Graphic Organizers** | **Photosynthesis & Cellular Respiration Graphic Organizer**  Complete the graphic organizer provided. | **Enzyme Graphic Organizer**  [**http://tinyurl.com/offrq69**](http://tinyurl.com/offrq69) | **Feedback Mechanism Table**  Go the following link and read about negative and positive feedback mechanisms:  <http://anatomyandphysiologyi.com/homeostasis-positivenegative-feedback-mechanisms/>  Then complete the graphic organizer over the information. |
| **Virtual Labs** | **Photosynthesis and Respiration**  <http://sepuplhs.org/high/sgi/teachers/photosynthesis2_sim.html> | **Enzyme Controlled Reactions**  [**http://www.mhhe.com/biosci/genbio/virtual\_labs/BL\_11/BL\_11.html**](http://www.mhhe.com/biosci/genbio/virtual_labs/BL_11/BL_11.html) | **Interactive Homeostasis Activity**  <http://ats.doit.wisc.edu/biology/ap/ho/ho.htm>  Go through Topic 1 and Topic 2. Once you are at the interactive screen, click on the different times to go through the different scenarios. |
| **Vocabulary** | **Photosynthesis and Respiration Flashcards**  [**http://quizlet.com/706048/cell-energy-photosynthesis-and-respiration-flash-cards/**](http://quizlet.com/706048/cell-energy-photosynthesis-and-respiration-flash-cards/) | **Enzymes Flashcards**  <http://quizlet.com/51505298/enzymes-flash-cards/> | **Homeostasis Flashcards**  <http://quizlet.com/3481937/homeostasis-flash-cards/> |
| **Video Clips** | **BrainPOP Photosynthesis and Respiration Video and Quiz**  <http://glencoe.mcgraw-hill.com/sites/dl/free/0078802849/164155/00053412.html>  Watch the video and then take the quiz. | **Enzyme and…Pac-Man**  <http://www.youtube.com/watch?v=XUn64HY5bug&feature=youtu.be> | **Homeostasis**  https://www.khanacademy.org/partner-content/mit-k12/mit-k12-biology/v/homeostasis |

**Critical Thinking Questions**

**Write answers in your notebook!!!!!!**

1. Why are photosynthesis and cellular respiration viewed as complementary processes?

2. Describe and illustrate the process of homeostasis?

3. How are enzymes important in metabolism of biomolecules?

4. Describe the effect of enzymes on activation energy in relationship to reactions.

**9.B Photosynthesis & Cellular Respiration Graphic Organizer**

|  |  |  |
| --- | --- | --- |
|  | **Photosynthesis** | **Respiration** |
| **Organelle involved** |  |  |
| **Equation** |  |  |
| **Your definition** |  |  |
| **Occurs in what types of cells** |  |  |
| **Importance** |  |  |

**11.A Feedback Mechanism Table**

Go to the following link to help you complete the table:

<http://anatomyandphysiologyi.com/homeostasis-positivenegative-feedback-mechanisms/>

|  |  |  |
| --- | --- | --- |
|  | **Negative Feedback Mechanisms** | **Positive Feedback Mechanisms** |
| **Bodily example** |  |  |
| **Body systems involved with feedback mechanism** |  |  |
| **How this example maintains homeostasis** |  |  |