## **Grade 8**

Distance Learning Module 4: Week 4/20<sup>th</sup> - 4/24<sup>th</sup>

## Grade 8 Science - Modified from Unit 5 Natural Selection

## **Targeted Goals from Stage 1: Desired Results**

**Content Knowledge:** Peppered Moth questions: this activity will require students to identify how genetic mutations are not always a detriment. By playing the "game" and completing the reading, students will evaluate the benefits of natural selection.

Vocabulary: Similar vocabulary to week's 1-3

**Skills:** Students will identify/recall information from selected readings. They will then engage in an online activity that requires them to take on the role of a predatory bird and "eat" different colored moths, some of which have mutated to better suit their newly changed environment. They will continue to analyze experimental data, synthesize information, and communicate learning.

**Expectation:** Students will use their knowledge of genetics, genetic mutation/natural selection to evaluate how mutation is not always a negative response. They will record and analyze their findings/results to accomplish this in a written packet

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: If you have not finished the webquest, please do this first. Go to the link (accept Adobe Flash Player) and click on the 4 different "bubbles". First, read about the life cycle of the peppered moth, how pollution affected the moths, Dr. Kettlewell's findings and tests, then "play" the simulation. You are the bird that has to eat the moths. Continue to fill out the transfer task listed in column 3. "Play" the game several times to get the hang of it, then record your results for several generations. Use this packet for the entire week as there is a lot to it.	This animation "game" will be used all week. This is what's called a transfer task where you will be asked to apply your knowledge of genetics and natural selection (evolution) to a new situation.  http://peppermoths.weebly.com/  Today, do the reading and practice the game. Please answer questions 1 through 5 on the Peppered Moth document.	Peppered Moth Activity
Tuesday: Continue Peppered moth simulation activity	Today, please answer questions 6 through 11 on the Peppered Moth document.	Peppered Moth Activity
Wednesday: Continue Peppered moth simulation activity	Today, please answer questions 12 through 16 on the Peppered Moth document.	Peppered Moth Activity
Thursday: Continue Peppered moth	Today, please answer questions 17	Peppered Moth Activity

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
simulation activity	through 24 on thePeppered Moth document.	
Friday: Answer key will be made available/posted on Friday	Please submit your Peppered Moth Activity in the Google class	Answer key will be made available/posted on Friday

Week criteria for success (attach student checklists or rubrics):

Submit completed peppered moth packet via google classroom or e-mail with analysis and other answered questions.

**Supportive resources and tutorials for the week** (plans for re-teaching): Students can "practice" the simulation many times to come to the conclusion that the easier the moths are to see, the easier it is to "eat" them. All documents listed are also viewable in Finalsite resource folders.