Name _____ Period _____
Date _____ Peppered Moth Lab
(60 minutes)

Peppered Moth Analysis

Go to the website http://peppermoths.weebly.com/. Click the circles at the bottom, click through using the arrows, read the information and answer the following questions for each section

Life Cycle

1. Where does the term "peppered moth" come from?

2. What animals prey on the peppered moth?

3. What is a lichen?

4. What do the moth larvae eat?

5. How do peppered moths prepare for winter?

6. What are moths that have more dark spots than the average moth called?

Impact of Pollution

7. Where was the first black moth appear?

8. Describe the Industrial Revolution?

9. What was causing the different colors in the moths?

10. Describe natural selection?

11. Which scientist suggested that an example of natural selection was evident with peppered moths?

12. What is industrial melanism?

Kettlewell's Experiments

13. What does an entomologist study?

14. Write down ONE of Kettlewell's predictions.

16. Where were the dark moths found?

17. Was Kettlewell able to directly study the moths? If so, how? If not, why not?

18. Which moths had a survival advantage? Why?

19. When Kettlewell recaptured the marked moths, what did he find?

20. Where did Kettlewell publish his findings?

For “Birds Eye View” simulation

1. Data Table

	Percent Dark Moths	**Percent Light Moths**
Light Forest		
Dark Forest		

2. Explain how the color of moths increases or decreases their chances of survival depending on the environment.

3. 500 light colored moths and 500 dark colored moths are released into a polluted forest. After 2 days the moths were recaptured, make a prediction about the number of each type of moth that would be captured.

4. How has the striking change in coloration come about? (Include an explanation of how the dark moth appeared and how the proportion of dark moths changed from 0.0005% to more than 90% in polluted forests.)

5. What underlying law of nature has produced this change? (Use Darwin's theory of evolution and apply it to what you have learned in this investigation.)