

Title: Peppered Moths

Introduction: Only a few examples of natural selection are as clear or quick as the study of peppered moths in England in the 1800’s. In this activity you will use a computer simulation to model the changes that took place then.

Procedures:

1. Open the website: <http://www.techapps.net/interactives/pepperMoths.swf>
2. Read the introduction on the first circle and answer these questions as you click on the arrow button:
 - a. What are the life stages of a peppered moth?
 - b. What might have caused the first black moth to appear?
 - c. What changed in the environment of the peppered moth?
 - d. What did Dr. Kettlewell think was happening to change populations of the black and white moths?
3. Go to “Birds Eye View” and elect one person to be the “bluejay” first. Pick a background to start with.
4. The bluejay should “feed” for 1 minute. If you have time, do it twice.
5. Record the results for each background.
6. Compare your results to others in your class. Write your results on the board and average them.
7. Answer the analysis questions.

Data:

	Dark Soot Background			Light Lichen Background		
	Trial 1	Trial 2	My average	Trial 1	Trial 2	My average
Dark Moths eaten						
Light Moths eaten						
Class Average						

Analysis:

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

2. 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.

3. How does this example of natural selection provide evidence for evolution?

Conclusion: