

# Download File PDF Peppered Moth Activity Answers

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks



Bio 103 - Introduction to Biology  
Chapter 13: How Populations Evolve  
Peppered Moth Survey and Directional Selection

#### Background information:

Natural selection, the reproductive success of organisms best suited to their environment, is a driving force in evolution. Natural selection occurs within populations, which are interbreeding groups of individuals of the same species. Genetic variation, the alternative forms of genes for inherited traits, is one factor in the reproductive success of certain members of a population. The result of natural selection is adaptation, the changing of a population so that it is better suited to its environment.

Industrial melanism is the term used to describe the adaptation of a population by the darkening of its individuals in response to industrial pollution. One example of rapid industrial melanism occurred in populations of peppered moths, *Biston betularia*, in the area of Manchester, England, from 1845 to 1890. Before the industrial revolution, the trunks of trees in the forest around Manchester were light grayish green due to the presence of lichens. Most of the peppered moths in the area were light colored with dark spots. As the industrial revolution progressed, the tree trunks became covered with soot and turned dark. Over a period of 45 years, a dark variety of the peppered moth became more common. In this lab, you will simulate how successfully predators locate prey in different environments. Then you will analyze actual data and relate changes in a population of peppered moths with two color variations to changes in the environment.

#### Materials Needed (you'll need a friend to complete this lab)

1. sheet of newspaper
2. newspaper disks (2) a hole punch makes very nice disks
3. pink paper disks (2) again, a hole punch makes very nice disks
4. pencil with an eraser
5. wet paper towel in a small dish (saucer would work just fine)
6. colored pencils (2)

#### Procedure:

##### Part I: Simulating Predator-Prey Relationships

1. Work with a partner, and decide which of you will be the "predator" and which will be the timekeeper.

2. Place a sheet of newspaper on your lab table. If you are the timekeeper, scatter 10 pink paper disks and 10 newspaper disks on the newspaper while your partner looks away. The disks represent an predator's prey. If you are the predator, use the eraser end of a pencil to pick up as many disks as possible in 10 seconds while your partner watches the time. The eraser end of the pencil is to simulate the tongue of an ant-eater. It will be necessary to moisten the end of the eraser to more easily pick up the paper disks and place them in a small dish.

3. Count the number of each type of disk picked up in 10 seconds. Record these numbers in the data table below.

Data Table	Environment	Total Number of Ants Scattered on the Paper		Total Number of Ants Consumed by Predator	
		Pink Ants	Newspaper Ants	Pink Ants Consumed	Newspaper Ants Consumed
1	Newspaper	10	10		
2	Newspaper	10	10		
Average:					

1  
10/10/10/10/10/10/10/10/10/10

[Download PDF version of :](#)  
**Peppered Moth Activity Answers**