Name:

Pocket Mouse Lab

Before you begin, make a prediction: which environment will end with the most brown mice?

Click here to access the pocket mouse simulation. Play the game by dragging the predator over the prey and clicking. Try to have your predator eat as many mice as you can before the time stops. Record your results in the table below.

		Start	End
Grasslands	% of Gray Mice		
	% of Brown Mice		
Mountain Rock	% of Gray Mice		
	% of Brown Mice		
Desert Sand	% of Gray Mice		
	% of Brown Mice		

Be prepared to share your results with the class

Post Lab Analysis:

1.a What did the experiment show about how prey are selected by predators?

1.b Did your experiment support your hypothesis?

2. Explain why a rock pocket mouse color influences its overall fitness. Remember that "fitness" is defined by an organism's ability to survive and produce offspring.

3.a In the simulation the white and brown blobs represent mice, what mouse coloration is best adapted for a dark (mountain rock) background?

3.b What coloration is best adapted for a light (desert sand) background?

Video: Watch this video with the class, as you watch fill in the guided notes below.

Video Questions:
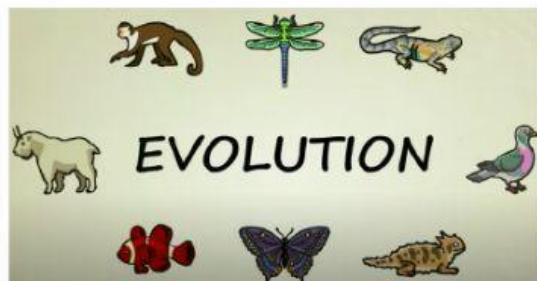
1.) What is the theory of evolution?

2.) What is descent with modification?

3.) What is common descent?

4.) What is selective breeding?
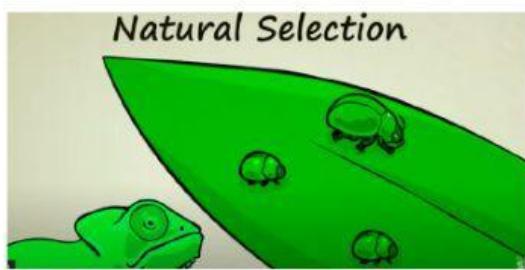
5.) What is Natural Selection?

TO SUM UP

6.) What is meant by this statement: "Mutation is random, but natural selection is not random."