Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_\_

 **Nowhere to Hide (Extra Credit 10)**

**Directions:**

* Go to [Nowhere to Hide](http://sciencenetlinks.com/media/filer/2017/12/21/evolution.html) to play the online interactive activity about natural selection.
* Click the **"How to Play"** button on the bottom left of the screen. Scroll down using the arrow key to read all of the instructions for the game.
* Now click the **"Back"** button to go back to the game and begin the online interactive. Remember, the goal of this activity is to observe what happens to the bugs (green and orange) in response to an increase or decrease in pollution levels (the color of the background). The pollution level can be altered by dragging the slider either towards the orange factory (more pollution) or towards the green trees (less pollution).
* Once you are finished playing the game, click on the **"Learn More"** button to read about the science and history behind the game.
* Then click **"Done"**
* Answer these questions based on the knowledge you gained from playing the interactive and from reading the "Learn More" section using complete sentences and a restate.

1. Which bugs (orange or green) were eaten more when there was a low level of pollution (background green)?

2. Which bugs (orange or green) were eaten more when there was a high level of pollution (background orange)?

3. What factor determined the survival of the bug? Why?

4. If the pollution level is high for an extended period of time, does this affect the survival of the green bugs? Yes or No.

5. Would they increase or decrease over time?

6. If the pollution level is low for an extended period of time, does this affect the survival of the orange bugs? Yes or No.

7. Would they increase or decrease?

8. In natural selection, the organisms that are best suited to survive in an environment have the most babies and grow in numbers, while organisms that aren't as well suited to the environment shrink and disappear. True or False.

9. Do you think this process occurs over a short period of time or a long period of time?