

Interactive Natural Selection

Click the following link to go through the [Natural Selection: Of Seasons and Species](#) activity (links are also online in the Canvas assignment) and answer the following questions as you go.

1. Over time, what will happen to the population of brown mice that live in a snowy environment compared to a population of white mice living in the same environment? Assume the only difference in the two populations of the mice is the color of their fur.
2. Which color mouse is more likely to survive and reproduce in the snowy environment?
3. Suppose a few brown mice had a mutation that caused their fur to turn white in colder temperatures. Would these mice be more or less likely to survive in this environment?
4. What is the term for traits an organism possesses that help it survive better?
5. Suppose that this population of mice has stabilized so that both white and brown appear; White mice survive better in the winter and brown mice survive better in the warmer months. **If a group of these mice migrated to an area that didn't get snowy in the winter, what would be the long term effect on the color of these mice?**

Click the following link to go to the activity [Natural Selection: Natural Disasters](#). Follow the directions to go through the activity and answer the questions below as you go.

Natural disasters like forest fires, can create strong selective pressures that affect how well certain members of a species can survive in an environment. These disasters dramatically change the environment and can destroy natural camouflage.

6. What color mice are more likely to survive before the fire?
7. Which color mice are more likely to survive after the forest fire?
8. Which statement is likely false about this mouse population after the forest fire occurs.
9. _____ are traits that would allow the black mice to survive and reproduce in the post fire environment.
10. What does not need to happen for natural selection to occur?