

Inquiry Question**What does survival of the sneakiest mean?****Name:** _____ **Date:** _____

As a population of organisms changes from one generation to the next we say it is evolving. This evolution occurs through natural selection. How does this work?

Those organisms that are best suited for a certain environment tend to be more successful and reproduce more often. This results in more offspring with the favourable adaptation. Future generations evolve to include more of these favourable adaptations.

For crickets, is being sneaky the secret to success? What adaptations are favourable? Remember that an adaptation is a trait that has a functional role and allows the organism to be more successful than others in the population.

Comic strips can provide a great deal of information, often in a humorous fashion. In this project, you will read the linked comic strip to answer and discuss some questions on natural selection.

General Instructions

The goal of this project is to better understand how natural selection works.

Materials you'll need:

- the internet
- the following "Survival of the Sneakiest" worksheet

Ideas and Hints:

- Read through the comic strip "Survival of the Sneakiest" [here](#).
- Answer the discussion questions in the following "Survival of the Sneakiest" worksheet.

Project submission:

Once you have finished your assignment submit your completed work to the Biology project drop box.

Survival of the Sneakiest Assignment:

Name: _____

Discussion Questions:

1. When it comes to crickets, what does fitness mean?
2. Is calling a good or bad thing for a cricket's fitness?
3. Give some examples of natural selection at work in this cricket story.
4. How does natural selection favour calling? How does natural selection favour not calling?
5. Now that you have deciphered the sneaky crickets, your skills are required to help solve the following problem:

The male crickets have been singing for as long as they can remember to attract their mate. Like years before, the males sang every evening in hopes to find the perfect female. This summer was an extremely hot and dry season. It was so hot and dry that the male crickets began to lose their voices! Panic surged through the male cricket population. If they couldn't sing to attract the females then how would they ever mate?!?! If there is no mating then there will be no more crickets. You are the crickets' last hope for survival!

You must come up with an adaptation that will allow the male crickets with no voice to attract the females. Include a drawing and explanation of how your adaptation works to attract the females. (You may need to do some research on how other bugs attract females to mate. The following link is a good place to start: [National Geographic Animal Search](#))