

Episode 6:
Who Wants to Live

DIRECTIONS:

Go to this page: http://coolsciencelab.com/who_wants_to_live_a_million_years.htm

Click on the link to “Learn about Natural Selection” and answer the following questions in complete sentences:

1. Does every species exhibit variation or are they exactly the same?
2. What types of variations are frequently exhibited in a population or species?
3. How are traits passed on?
4. What is “survival of the fittest”?
5. If an organism is _____ with _____ that will help it _____ or _____, it will likely produce more offspring than rivals without those traits. Eventually _____ traits can spread throughout a species.

PROCEDURE

1. Play the Survival Game “Who wants to live a million years?” Read the directions at the bottom of the game carefully, so that you pick traits for your organisms wisely. Click on “Hints” at the right hand side of the screen to look at the pros and cons for each choice.
2. Fill out the data table while you play. You will complete at least three tries.

	1st Try	2nd Try	3rd Try
Trait #1	Description:	Description:	Description:
	Purpose:	Purpose:	Purpose:
Trait #2	Description:	Description:	Description:
	Purpose:	Purpose:	Purpose:
Trait #3	Description:	Description:	Description:
	Purpose:	Purpose:	Purpose:

1st Event	Event:	Event:	Event:
	Who Survived?	Who Survived?	Who Survived?
2nd Event	Event:	Event:	Event:
	Who Survived?	Who Survived?	Who Survived?
3rd Event	Event:	Event:	Event:
	Who Survived?	Who Survived?	Who Survived?
Did you survive?			

WRITE UP

After the Survival game, click on the tab “Darwin’s Bio” and read the short excerpt about Darwin. Use this information to answer the following questions in complete sentences.

1. In the first part of the explanation for Darwin’s theory of natural selection, every species exhibits what?
2. What was the name of the ship that Darwin served as naturalist aboard from 1831 to 1836?
3. Natural selection is only one of the processes of evolution. What is one other process that can cause change in a species over time?
4. A species of organism has survived in a mild environment for thousands of years. Suddenly, the climate becomes much colder. Which of the following traits might help the species survive?
5. In 1835, Darwin studied variations in plants and animals on the Galapagos Islands. The islands were located off the coast of what major continent?
6. Which of the following traits might be passed from parent of offspring but not necessarily be beneficial to the survival of the species?
7. Part 3 of Darwin’s theory of natural selection states that life in the wild is competitive, and organisms with the most beneficial traits will prosper. What is this commonly known as?
8. In what book did Darwin publish his main theories on evolutionary selection?
9. In the survival game, how long are you trying to keep your theoretical species alive and prospering?