

Highlight important  
vocabulary words.

## Science Shorts -7

### Natural Selection

Things change. When an organism changes over many generations, it might be better suited to live, or more likely to die. The process the generations of organisms go through is called natural selection. Sometimes you've got a skill that helps you survive; sometimes you don't. If you were a 500-pound bird with little tiny wings and little tiny legs, chances are you wouldn't move around too well. One day you might run out of food and die. Oh well, your species was just selected by nature for extinction.

Until the 19<sup>th</sup> century, most scientists believed that organisms lived as they had first appeared on the earth. However, by the late 1700's scientists had found and studied many fossils. Fossils show that organisms have changed over time. Fossils show that many species, or kinds of organisms, died out. These organisms are extinct.

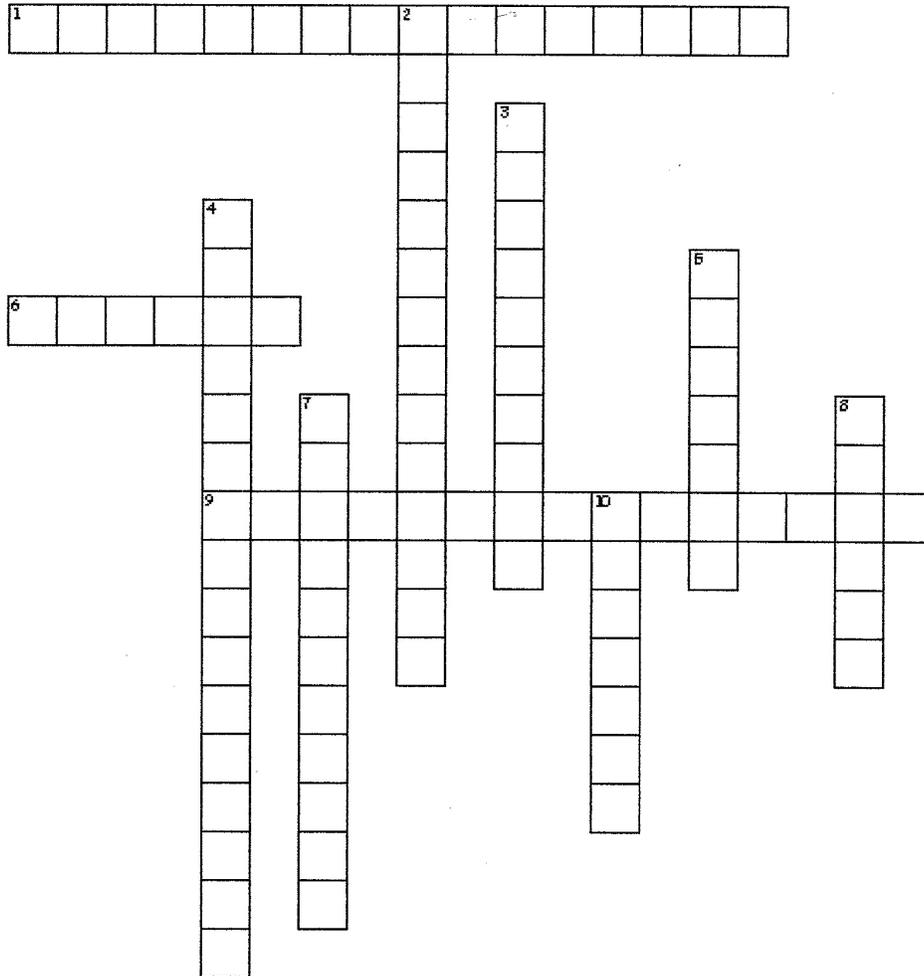
There are several ways that the process of natural selection occurs. The first one is called overproduction. Organisms produce more offspring than the environment can support. There is not enough food or living space for all the offspring, so these are limiting factors in the environment.

Another way is competition. Overproduction leads to a struggle. All the organisms compete for food, water and other necessities of life. Only those organisms that are well suited to their surroundings survive and reproduce. The rest die.

The next way that the process of natural selection occurs is through variations. Organisms of the same species are very similar. But they do have individual differences among traits, or variations. These differences are important in the "struggle for survival." For example, extra speed can mean the difference between life and death. A fast antelope may escape an attacking mountain lion. A slower neighbor may become the mountain lion's next meal.

The last way in natural selection is called survival of the fit. Organisms with traits that make them well adapted, or suited to the environment survive and reproduce. Charles Darwin used the term natural selection to describe the survival of organisms with favorable traits. They, in turn, pass their favorable traits to their offspring. The offspring are then more likely to survive. As the process of natural selection goes on over many generations, species change.

# Natural Selection



## Across

1. Organisms with traits that make them well adapted to the environment
6. Qualities, features or other things that are inherited from parents
9. Food, water, space and shelter

## Down

2. When organisms produce more offspring than the environment can support
3. Individual differences among traits
4. The survival of organisms with favorable traits
5. When the entire species of an organism dies out
7. When organisms struggle for food and water
8. Scientist who proposed the idea of natural selection
10. The remains of organisms that lived in the past