

Write your notes  
about what you are  
reading in this space.

## Science Shorts - 7

### Adaptations = Survival

An organism must be well suited for its environment in order to survive. It must be able to tolerate the climate. It must also be able to get food, protect itself from enemies and reproduce. An organism that is well suited to its environment is said to be adapted to its environment. Organisms that are adapted to their environment have a better chance of surviving and reproducing.

Any trait of an organism that helps it live in its environment is called an adaptation. Adaptations make each kind of living thing able to live in its environment. They allow one kind of organism to live where others cannot. For example, polar bears live unprotected in sub-zero weather. You cannot. Neither can most organisms. Polar bears are “built” for the bitter cold. They have a thick layer of fat and dense fur to keep them warm.

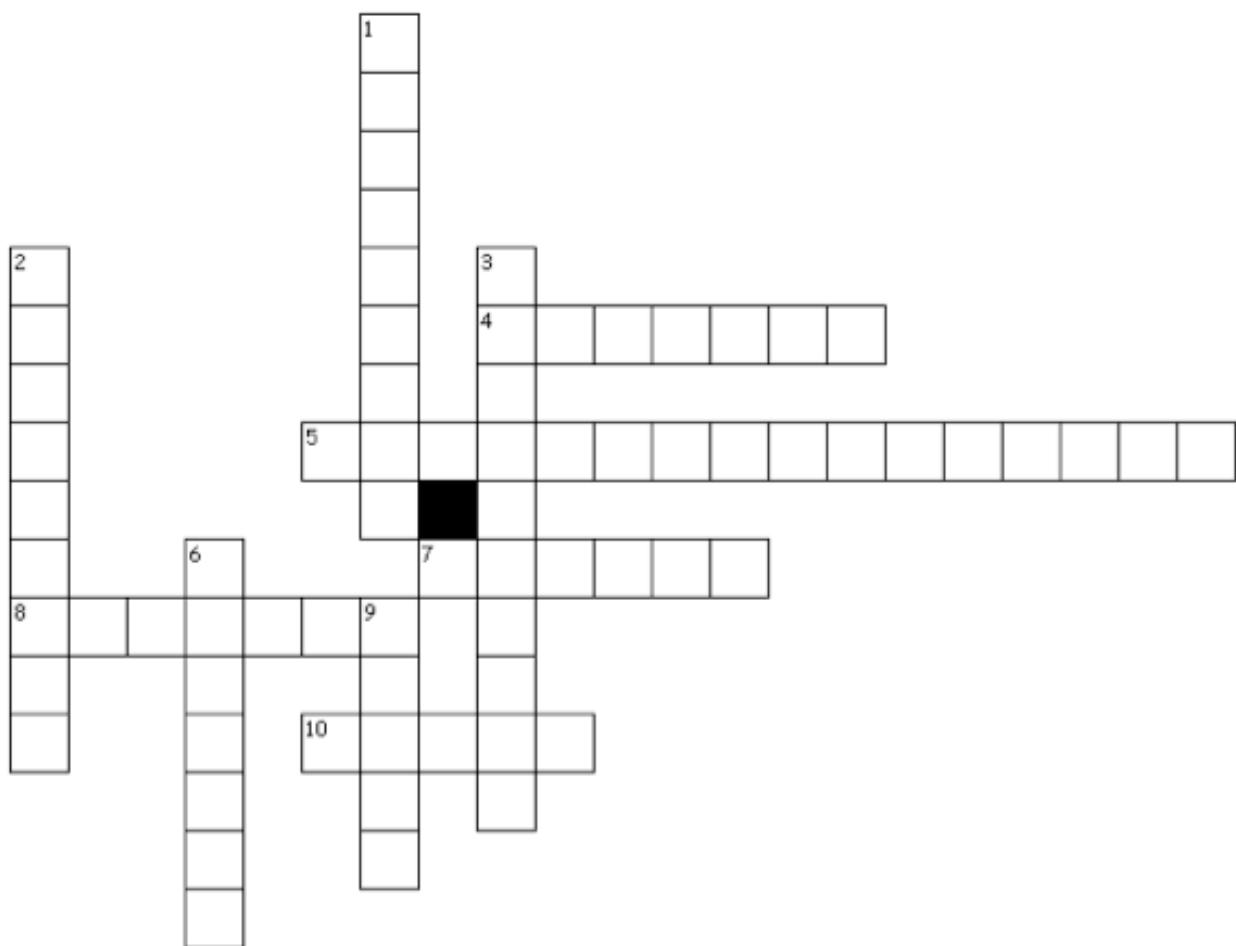
Some animals live comfortably in other climates. The camel, for example, is suited to live in the hot, dry desert. Alligators are suited to live in hot, humid marshes. Some organisms adapt by looking like other organisms. The monarch butterfly does not taste good to most birds, so they leave it alone. The viceroy butterfly is not bad tasting but hunting birds do not know this. The viceroy butterfly looks very much like the monarch butterfly so the birds leave both species alone. This adaptation is called mimicry. Adaptation applies not only to animals. It applies to plants and other living things as well.

A cactus can grow in the hot, dry desert while an oak tree cannot live there. An oak tree grows well in a cooler, moister environment. A banana tree grows well in the tropics but cannot live on the tundra. Each of these plants has special adaptations to help them survive in their environment.

Earth is about 4 ½ billion years old. Life has existed here for more than one billion years. Fossil records tell us that Earth has been constantly changing. So have its life forms.

Many species that lived in the past have died out. They are extinct. These organisms could not adapt to their changing environments. Some species, like the dinosaurs, became extinct when a catastrophic event quickly changed their environment. Other species, such as the passenger pigeon, could not adapt to the pollution caused by humans and became extinct.

# ADAPTATIONS



**Across**

4. well suited to its environment
5. tastes bad to birds
7. plant that grows in the desert
8. when a species dies out
10. animal that can live in the desert

**Down**

1. lives in hot humid marshes
2. animal with thick layer of fat
3. plant that grows in the tropics
6. looking like something else
9. something that helps you survive