

Summer 2 Week 9 Science

Lesson 3

Can I explain how living things are adapted to suit their environments?

This week we have been learning how characteristics are passed down from parents to offspring and from generation to generation.

Today we are going to look at how these characteristics mean plants and animals are adapted to their environments.

What is adaptation?

Adaptation means changing something in order to survive in a specific environment.



Why must living things adapt?

Living things must adapt when their natural habitat changes. This can be a permanent change or a seasonal change.

For example, in Canada winters can be extreme. Summers in Canada can be 35° C and higher, while -25° C is not uncommon for winter. This drastic difference means living things need to be adapted to survive when the weather changes.



How do living things adapt?

Each living thing has certain features that help it to adapt to its environment. For example, the polar bear does not hibernate in winter like the grizzly bear does. They are the same family, but polar bears have features that help them adapt to the cold.



- They have thick fur coats.
- They have a layer of fat under their fur.
- They have hair on their paws: this helps them avoid slipping on the ice.

The polar bear has other adaptations, not just ones to help it survive the cold temperatures. How effective would the polar bear be if it hunted with bright blue fur? Adaptation has allowed the polar bear to have the right colour fur for its environment.

Watch the video clip below to see a little bit more

<https://www.bbc.com/bitesize/articles/zxg7y4j>

It isn't just animals that have to adapt to living in cold climates. Arctic plants have to adapt too.

- They are usually smaller (less than 30cm) to avoid high winds.
- They have small waxy leaves/ needles
- Some are covered with hair.
- Some grow in clumps together for protection.
- Some plants have dish-like flowers that follow the sun.



Saxifrage



Arctic Willow



Bearberry



Arctic flower

Your task today is to write some short sentences explaining how living things are adapted to their own environments.

There is a list to pick from and a support document with lots of information for you to use.