

As Scientists we are learning about... Have we always looked like this?

Evolution occurs when there is competition to survive (natural selection) and differences within a species caused by inheritance and mutations. Inheritance is when something is passed on to the next generation. Offspring are not identical to their parents and hence species change over time. Some characteristics are inherited.

Living things and their offspring

- Living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- Animals and plants adapt to their environment and over time, adaptation may lead to evolution.

Fossils

- Fossils provide information about living things that inhabited the Earth millions of years ago.
- Fossils can show the evolution of species over time.

Famous scientists

- Charles Darwin (1809-1882) was an English scientist who studied nature. He is known for his theory of evolution.
- Other famous scientists relating to this topic are: Mary Anning (1799-1847) and Alfred Wallace (1823-1913)

Key Vocabulary

Off-spring

When living things reproduce they pass on characteristics to their **offspring**. All living things produce **offspring** of the same kind, but normally **offspring** are not identical to their parents.

Adaptation

Adaptation is the process by which animals, plants and other living things have changed so that they better suit their habitat.

Evolution

Evolution is the theory that all the kinds of living things that exist today developed from earlier types.

Inheritance

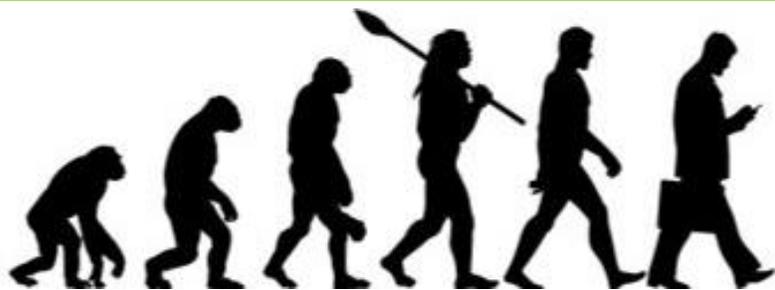
When living things reproduce they pass on characteristics to their offspring. This is known as **inheritance**.

Chromosomes

Chromosomes are tiny structures inside cells made from DNA and protein.

Genes

Genes that are passed on to you determine many of your traits, such as hair colour and skin colour.



Going further with your learning...

Could you find out what different religions think about the theory of evolution?
Do they agree or disagree with it?



Article 28

Every child has the right to an education



As Geographers we are learning about...

What is the impact of climate change on our local environment and other world habitats?

Climate change describes a change in the average conditions — such as temperature and rainfall — in a region over a long period of time. For example, 20,000 years ago, much of the United States was covered in glaciers. In the United States today, they have a warmer climate and fewer glaciers.

Global climate change refers to the average long-term changes over the entire Earth. These include warming temperatures and changes in precipitation, as well as the effects of Earth's warming, such as:

- Rising sea levels
- Shrinking mountain glaciers
- Ice melting at a faster rate than usual in Greenland, Antarctica and the Arctic
- Changes in flower and plant blooming times.

Earth's climate has constantly been changing — even long before humans came into the picture.

However, scientists have observed unusual changes recently. For example, Earth's average temperature has been increasing much more quickly than they would expect over the past 150 years.

Some parts of Earth are warming faster than others. But on average, global air temperatures near Earth's surface have gone up about 2 degrees Fahrenheit in the past 100 years. In fact, the past five years have been the warmest five years in centuries.

Many people, including scientists, are concerned about this warming. As Earth's climate continues to warm, the intensity and amount of rainfall during storms such as hurricanes is expected to increase. Droughts and heat waves are also expected to become more intense as the climate warms.

When the whole Earth's temperature changes by one or two degrees, that change can have big impacts on the health of Earth's plants and animals, too.

Key Vocabulary

Biodiversity

Variety of plant and animal life in a particular habitat, a high level of which is usually considered to be important and desirable.

Biomes

Biomes are distinct biological communities that have formed in response to a shared physical climate.

Deforestation

When forests are cut down and the area is permanently cleared for another use.

Endangered

An endangered species is a species which has been categorized as very likely to become extinct.

Extinction

The extinction of a species of animal or plant is the death of all its remaining living members.

Indigenous

Indigenous people or things belong to the country in which they are found

Temperate

Relating to or denoting a region or climate characterized by mild temperatures.



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Going further with your learning...

How do you think the UNICEF Sustainable Development Goals will impact climate change in the future?

