

# Summer 2 Week 9 Science Lesson 2

Can I understand that offspring have similarities and differences to their parents?

# What are offspring?

In biology, offspring are the young born of living organisms. In the animal kingdom most offspring are produced by two parents.



For many living things offspring look like their parents - albeit smaller versions of them.



While all living things produce offspring of the same kind, offspring are not identical to their parents; there are variations that make them different.

To understand why this happens we need to look at inheritance.



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

Humans **inherit** key characteristics from their parents, like eye colour and height.

Some characteristics are not inherited, such as hair style and accent.

**If offspring inherit their characteristics from their parents why are they not identical?**

Living things inherit characteristics from both parents. This mix of both characteristics makes them unique and is called variation.

The inherited characteristics can combine in different ways, which is why siblings inherit the same characteristics, but look different to each other, known as variation.



These are famous actors who are brothers. Owen, Luke and Andrew Wilson. They have the same parents as each other, and all have characteristics of their parents. However, they all look very different. This is down to variation and the random way that characteristics are inherited.

This video clip on bitesize has some information on inheritance.

<https://www.bbc.co.uk/bitesize/topics/zvhhvcw/articles/zp9f4qt>

The clip explains more about how offspring have some characteristics from both parents.



Variation is easy to see when you look at different breeds of dogs and their offspring.

Husky



+ Corgi



= Horgi



Variation is easy to see when you look at different breeds of dogs and their offspring.

Dalmatian

Dalmatian + Dachshund = Dachshund Cross



Your task today is to fill in the missing information from the sentences explaining inheritance and variation.