# Evolution – Inheritance

EMPIRIBOX Primary School Science

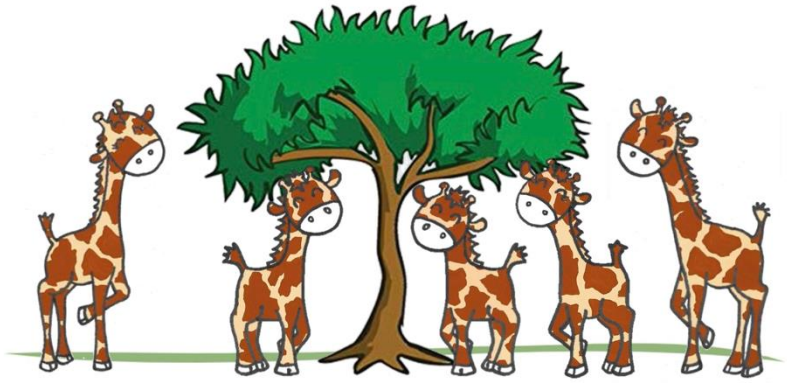
**Name**_____ **Class**_____

**What you will need for this lesson:** glue, string and a variety of materials you can find around the house like a paper plate, cardboard, foil, brown paper, baking paper.
Ask an adult to help you find these items.
**You will also need a pen, a pencil and if you have it, access to a computer, tablet or iPad.**

## LESSON STARTER

**We know that living things have offspring. The offspring of any living thing is the same species as its parent and has many similar characteristics (or features) but is not identical.**

**Look at the picture of the giraffes below.**



EMPIRIBOX Biology CRD129

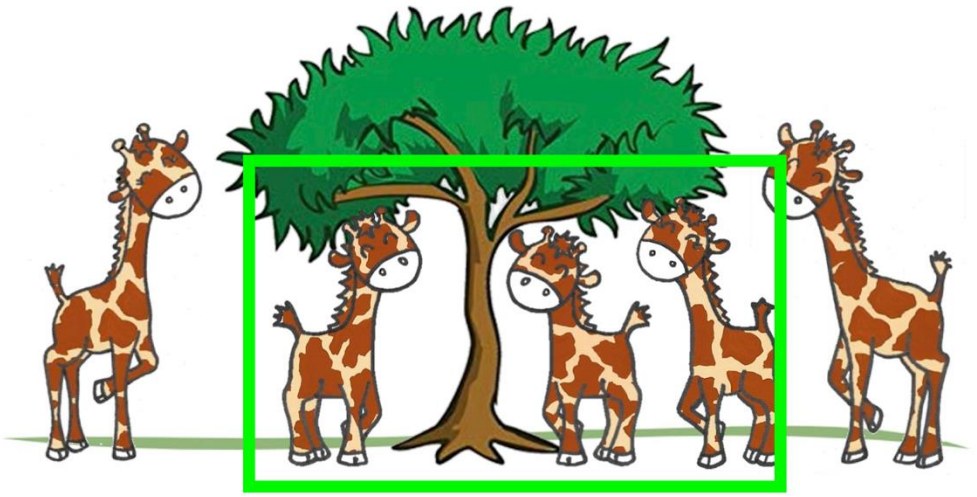
One characteristic of giraffes is that they have long necks. Why do you think this is?

_____

_____

_____

You can see the offspring (children) of the parent giraffes in the picture below.



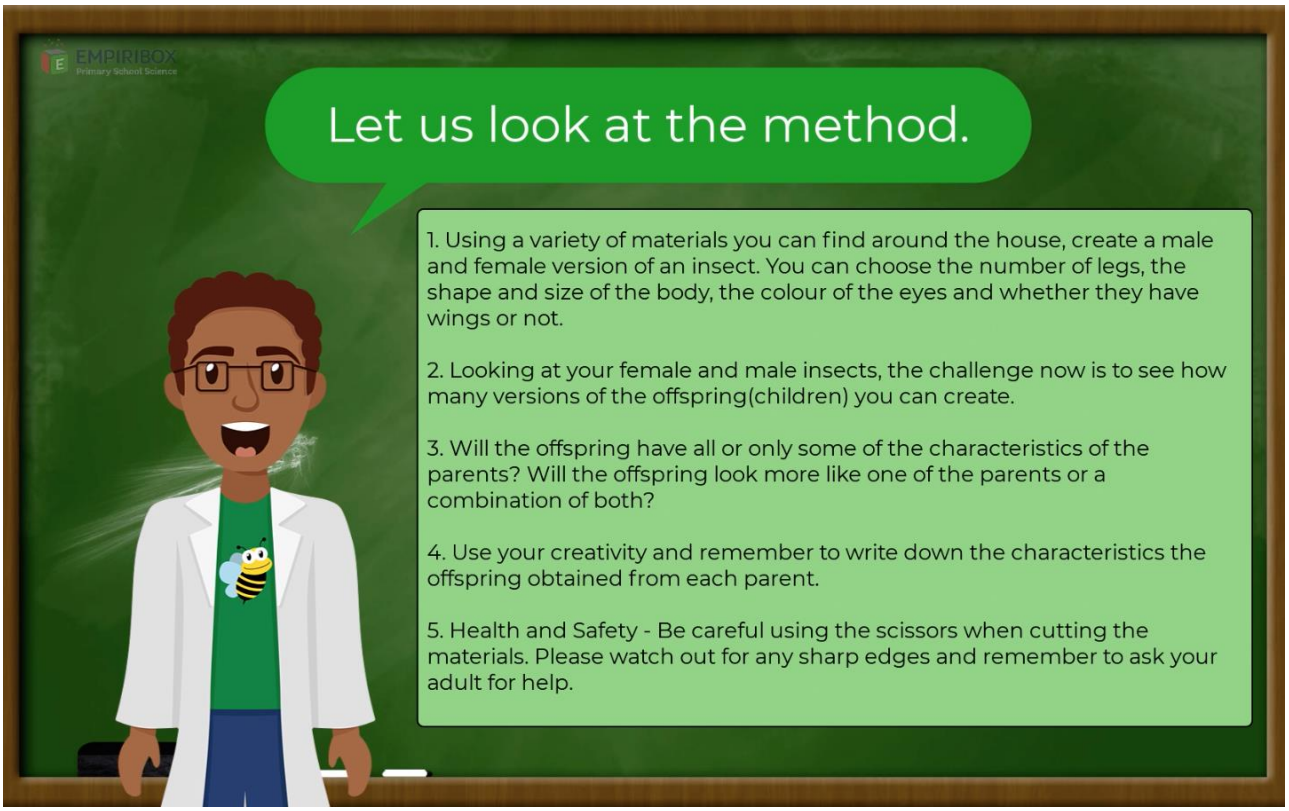
Have the offspring got the same characteristics as their parents?

Are they identical (exactly the same) as their parents?

**When you've finished, watch the video to see whether you were right!**

## The Investigation

**We are going to make our own species of bug! We will make their offspring and choose the characteristics we think they will share with their parents.**




What did your bugs look like?

_____

_____

What characteristics did the parents and the offspring have in common?

_____

_____

## The Investigation

**In the space below sketch the bugs that you created.**

## WORKING SCIENTIFICALLY

Given the nature of our investigation our working scientifically focus in this lesson is that of **EVALUATION.** It does not lend itself to the planning nor presenting or analysis of data.

## EVALUATION

In the investigation, you created the parents and offspring of a species of insect. **Write the detail of each parent and offspring in the table below.**

**Analyse each of the offspring and work out which parent's characteristic is the most dominant for body shape, number of legs, fur or skin colour, number of antennae and number of eyes.**

| | Body shape | Number of legs | Skin/fur colour | Antennae | Number of eyes |
|---|---|---|---|---|---|
| **Mother** | | | | | |
| **Father** | | | | | |
| **Offspring 1** | | | | | |
| **Offspring 2** | | | | | |
| **Offspring 3** | | | | | |
| **Dominant parent's characteristic** Mother, Father or None | | | | | |

## EVALUATION continued

Do the offspring look like each other? _____

_____

Do the offspring look more like one parent than the other? _____

_____

_____

Is there a dominant (a particularly strong) characteristic that each offspring share?

_____

_____

_____

If so, which parent do they get that from? _____

_____

_____

## The science behind the investigation

**Parents pass on some of their own characteristics (features) to their offspring (children). Offspring, although they look similar to their parents, are not identical.**

**Lions have different characteristics – the female looks different to the male. The lion cub will have inherited some characteristics from its mother and some from its father.**

Look at the pictures of the Pug, Beagle and Puggle below. The puggle is a cross between the Pug and the Beagle. Which characteristics has the Puggle received from the Pug on one hand and the Beagle on the other.

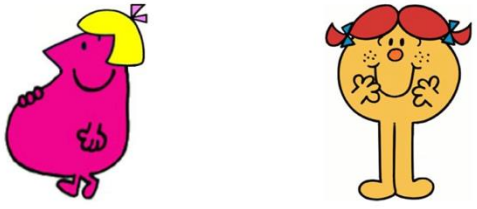
## Your challenge!

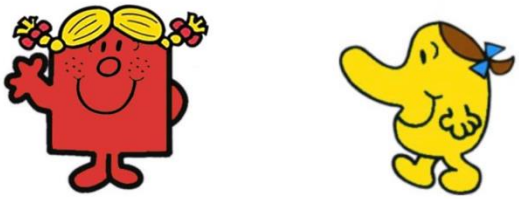
### Look at the pictures of the Mr Men and Little Miss characters below.


**Below are the offspring of one of the Mr Men and Little Miss characters. Can you work out which Mr Men is the father and which Little Miss is the mother of each of the children?**

Mother _____ Mother _____

Father _____ Father _____





Mother _____ Mother _____

Father _____ Father _____

## Can you work out which features belong to the mother and the father?

_____

_____

_____

_____

_____

_____

_____

_____

## What was your score?


_____