

**Year 6 Science**

**Monday 15<sup>th</sup> June 2020**

**Lesson 2 – Evolution and inheritance**

LO- I can understand how human beings have evolved.

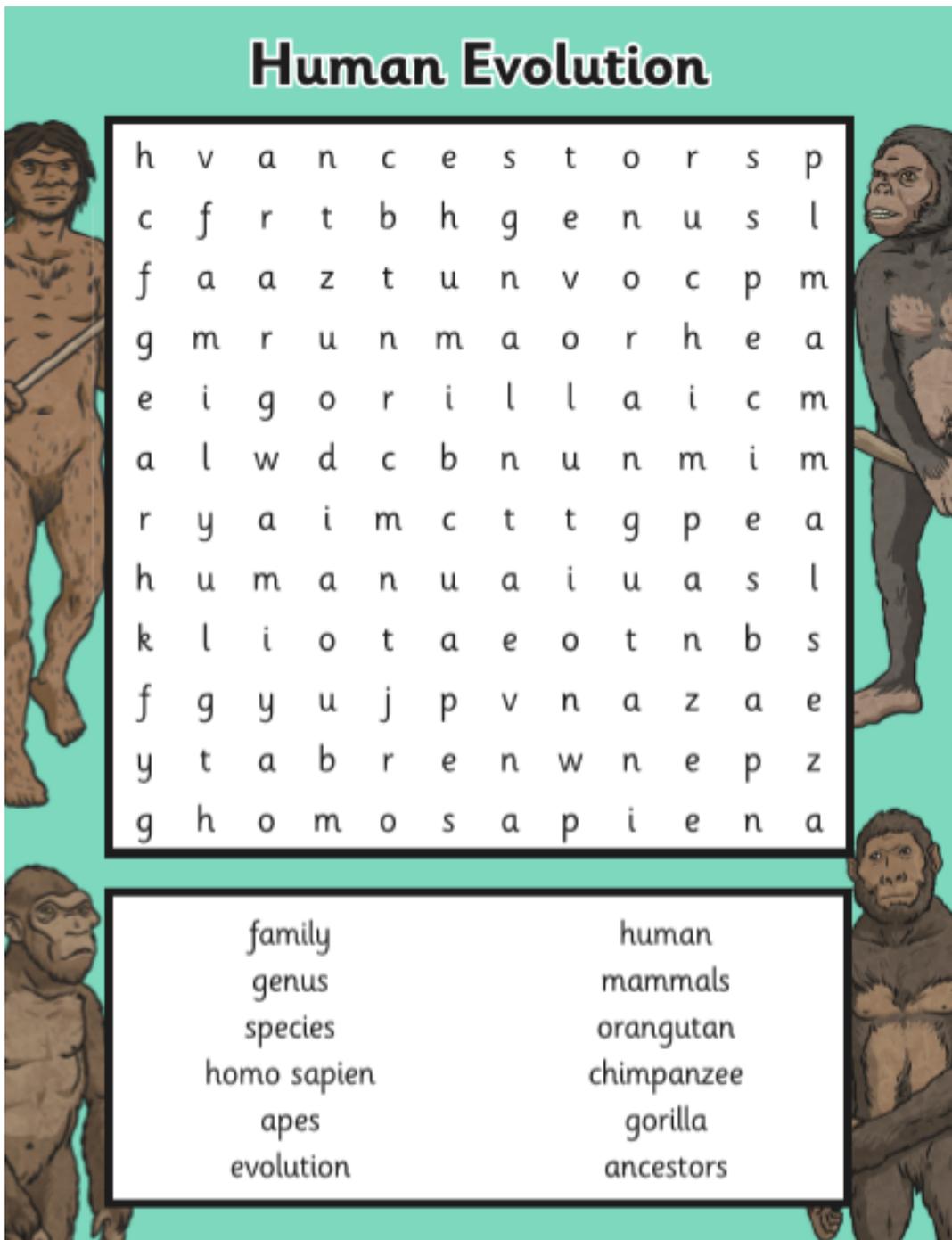
I can identify adaptive traits in humans as a species.

I can describe the known stages of human evolution.

I can compare modern humans with members of the same genus and family

**Activity 1: Revision:**

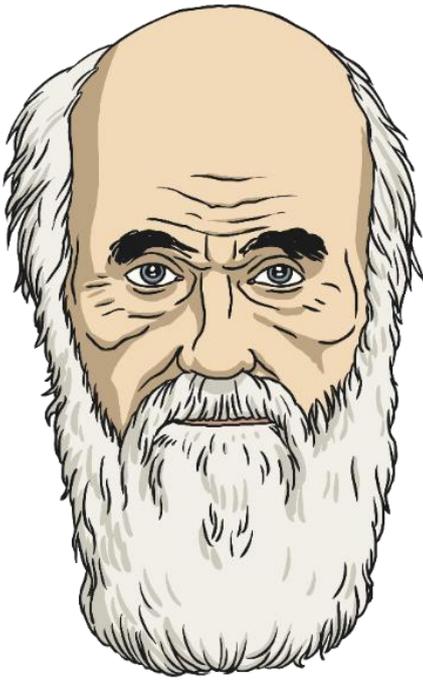
Complete this word search to revise the vocabulary from previous lessons.



**Human Evolution**

h	v	a	n	c	e	s	t	o	r	s	p
c	f	r	t	b	h	g	e	n	u	s	l
f	a	a	z	t	u	n	v	o	c	p	m
g	m	r	u	n	m	a	o	r	h	e	a
e	i	g	o	r	i	l	l	a	i	c	m
a	l	w	d	c	b	n	u	n	m	i	m
r	y	a	i	m	c	t	t	g	p	e	a
h	u	m	a	n	u	a	i	u	a	s	l
k	l	i	o	t	a	e	o	t	n	b	s
f	g	y	u	j	p	v	n	a	z	a	e
y	t	a	b	r	e	n	w	n	e	p	z
g	h	o	m	o	s	a	p	i	e	n	a

family	human
genus	mammals
species	orangutan
homo sapien	chimpanzee
apes	gorilla
evolution	ancestors



## **Controversy of Human Evolution**

In science, the theory of evolution is seen as the most comprehensive theory of how humans came to be on Earth.

However, Darwin had shied away from publishing his findings as he knew it was a controversial.

Indeed it was, and in his lifetime, the reception to his ideas was mixed.

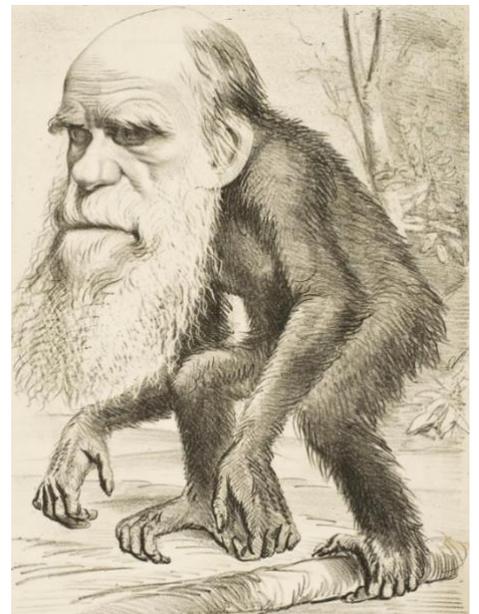
Many people believed, for a number of different reasons, that humans were fundamentally different to other living things.

Therefore they would not even have classed humans as animals.

Most people would not have read the books and or come across the ideas that Darwin had.

While he was building on the ideas of others, for many ordinary people, his ideas were brand new and a complete break from what they had thought before.

*The cartoon to the right was one of many from people who were sceptical about his theory.*



The greater knowledge of fossils and their collection by scientists meant that in the 20th Century they were better understood when found.

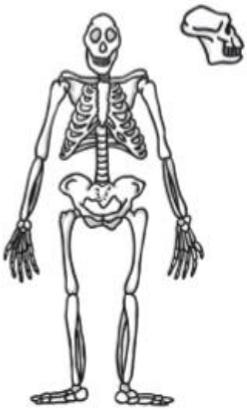
Over the course of the last century many fossils have been found that demonstrate the evolution of humans (homo sapiens).

Initially, fossils were compared to the human skeleton to indicate the degree of similarity or difference.

However, modern scientists have been able to map DNA in great detail and this gives them another way to compare how closely related we are to different living things in ways that could not have been detected by comparing skeletons alone.



**Activity 2:- Compare the similarities and differences between a modern human and an Australopithecus Afarensis**

Physical Appearance		Skeletons	
 <p>Australopithecus Afarensis</p>	 <p>Human</p>	 <p>Australopithecus Afarensis Skeleton</p>	 <p>Human Skeleton</p>
Similarities		Similarities	
Differences		Differences	

Activity 3:- Compare the similarities and differences between a modern human and an Australopithecus Afarensis.

### Physical Appearance



Australopithecus Afarensis

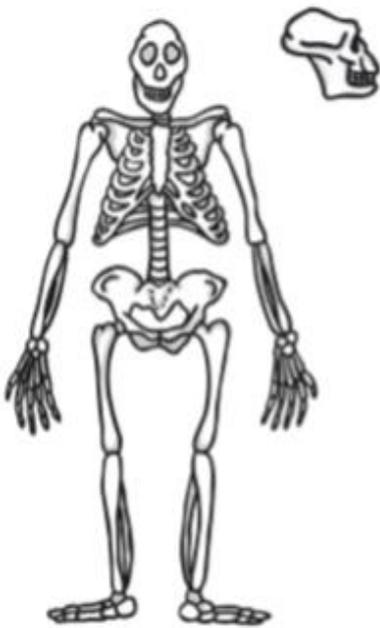


Homo Neanderthalensis



Human

### Physical Appearance



Australopithecus Afarensis



Homo Neanderthalensis



Human



## Physical Appearance

Similarities between all three:

Similarities between Australopithecus Afarensis and Homo Neanderthalensis:

Differences between Australopithecus Afarensis and Homo Neanderthalensis:

Similarities between Australopithecus Afarensis and Human:

Differences between Australopithecus Afarensis and Human:

Similarities between Homo Neanderthalensis and Human:

Differences between Homo Neanderthalensis and Human:

## Skeletons

Similarities between all three:

Similarities between Australopithecus Afarensis and Homo Neanderthalensis:

Differences between Australopithecus Afarensis and Homo Neanderthalensis:

Similarities between Australopithecus Afarensis and Human:

Differences between Australopithecus Afarensis and Human:

Similarities between Homo Neanderthalensis and Human:

Differences between Homo Neanderthalensis and Human: