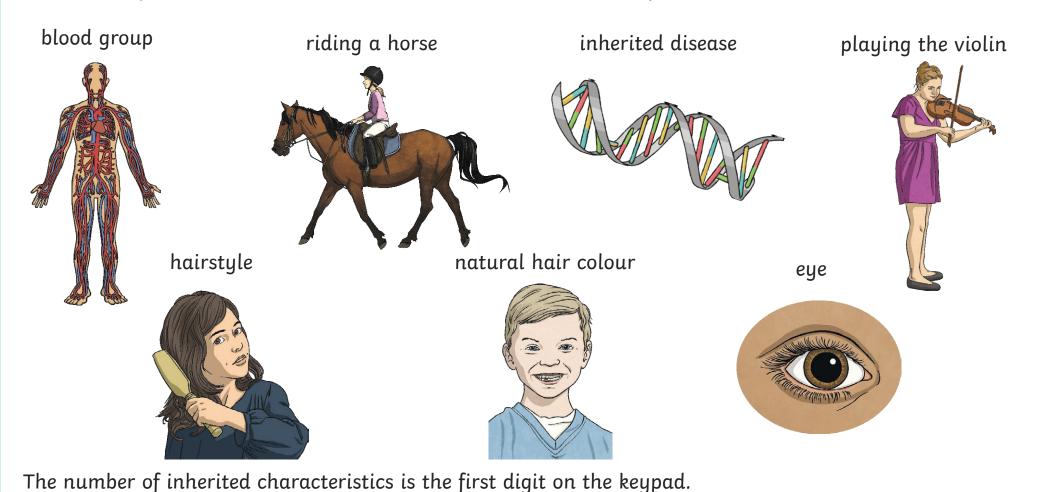
You might have been told before that you've inherited certain characteristics from your parents. It is true that some characteristics are inherited but some are environmental.

Look at the pictures below. Which are inherited and which are acquired characteristics?





Adaptive traits help a living thing survive better in its environment. As it lives longer, it means that it has a greater chance of reproducing and so the adaptive trait gets passed on. Which of the following statements are true and which are false?

Camels have wide, flat feet to make it easier to walk in the sand.

Coral contains toxins which deter predators.

Ash trees have broad leaves to catch plenty of sunlight.

A toucan's claws are small and blunt to allow it to grip.

The cactus can store water in its stem.

Bats have good eyesight to enable them to see in the dark.

The number of true statements is the second digit on the keypad.



#### Who am I?

I was born in 1809. From a young age, I was passionate about studying living things. I trained to be a doctor but couldn't deal with all the blood. Instead, I studied plants and animals. At the age of 22, I travelled to the Galapagos Islands. It was there that I started to come up with my greatest theory: 'The Theory of Evolution'. Evolution is the process of adaptation over a long period of time.

Mary Anning
Zhang Zhou
Alfred Wallace
Charles Darwin
Epicurus

The number of letters in my first name is the next digit on the keypad.





Read the statements and fill in the gaps. Make a note of the answer's corresponding number. Add the numbers of the correct answers to find the next digit.

Darwin discovered that humans and apes shared ancestors. Evolution happens over an extremely long period of time so we don't really notice it. There are small changes with each new \_\_\_\_\_\_.Evolution happens through inheritance.

- 1. decade 2. century 3. generation

Animals and plants evolve to make adaptations to not only survive but to survive better. Some of these changes are down to \_\_\_\_\_\_.

- 1. gender 2. habitats 3. age

Darwin studied different finches living in different parts of the Galapagos Islands and realised that, even though they were different, they all had the same ancestors. Some had evolved to have larger \_\_\_\_\_\_ in certain areas and some had smaller ones in other locations due to different food being available.

- 1. feet
- 2. heads 3. beaks





Survival of the_	
	of their inherited or adaptive traits, survive while others do not.

1	strongest							
2	biggest							
3	fittest							
4	tallest							
5	fastest							
6	smallest							

The number of the correct answer is the next digit for the keypad.



Read the clue and write the answer, putting one letter in each box. The letters in the orange boxes spell the next digit on the keypad.

The process whereby certain inherited and adaptive traits allow living things to survive and reproduce while others become extinct is called what?													
What preserved remains are used as evidence to support the theory of evolution?													
Which part of an animal is most likely to be fossilised?													
Many living things, such as soft-bodied animals and most types of plants, have very incomplete records and fossil finds are very													

The number of the circuit in which the buzzer be the loudest is the sixth digit of the security code.





Match these words to their correct definitions.

evolution

adaptation

inheritance

offspring

species

The helpful changes, which occur through natural selection, in a species that allow it to survive in a changing environment.

The children or young of a person or animal.

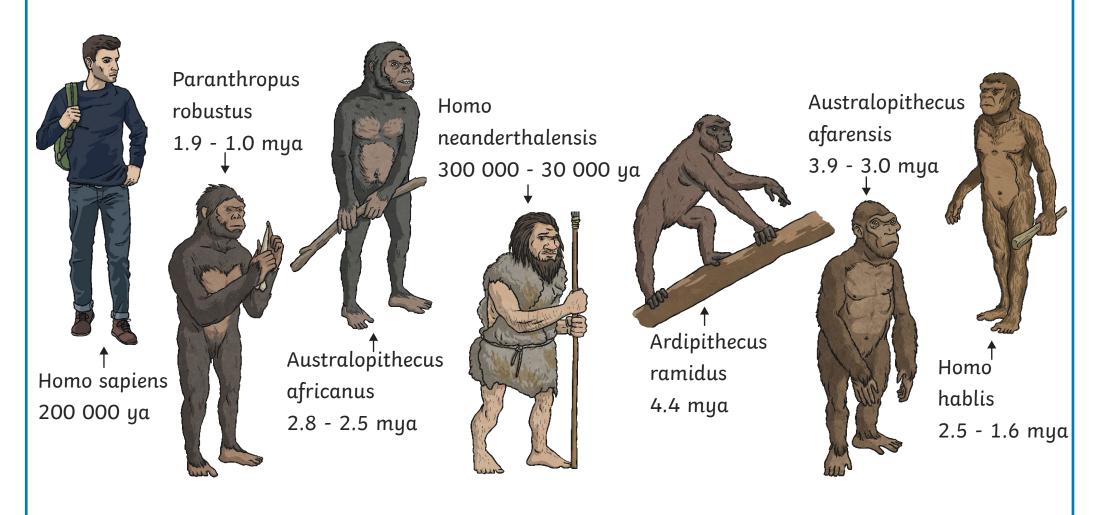
The gradual change in the characteristics of a population of animals or plants over a number of generations.

The passing of genetic characteristics from parents to offspring.

There is one word left without a definition. The number of letters in this word is the seventh digit on the keypad.



Put these images in chronological order. Once ordered, look at the fifth illustration. Count the number of letters in the second part of the name. This is the eighth keypad digit.





How many of these statements are true? The number of true statements is the final digit on the keypad.

All living things have a similar number of adaptations.

It is rare that an adaptation will have a completely positive or negative effect on the organism.

Selective breeding (or artificial selection as it is sometimes referred to) involves humans deliberately breeding plants and animals to produce characteristics, therefore producing a new species e.g. sheep with thicker coats and wheat that produces more grain.

Humans breed plants and animals to produce organisms with characteristics. This produces a new species.



