



Year Groups: Year 5-6

Length: 28 mins

Starting Positions: Sit in your own space on the floor

Learning Intentions:

To know about:

- How we inherit characteristics from our parents
- How animals become suited to their environment over time by inheriting favourable characteristics
- The role of natural selection (“survival of the fittest”) in this process
- How Charles Darwin proved the theory of evolution (in the face of opposition)

Synopsis:

- Your clumsy Dad drives you to your first day of secondary school in his taxi cab.
- You’re late for science. When you accidentally break the test-tubes, you’re sent to the headteacher.
- In the head’s office, a strangely-dressed man persuades you to be his navigator on a mission...
- On board HMS Beagle, Darwin reveals he’s time-travelling to stop scientists from disproving his theory.
- You navigate to Saudi Arabia 5 million years ago where you find some half-evolved camels.
- Two babies have signs of a hump/wide feet. Richard Owen appears and attempts to kill them.
- You drive Owen away. He’s only managed to kill the less well-adapted babies (so the fit survive).
- You go to London, 1860 (Darwin’s time). A moth has adapted to newly-darkened trees (from pollution).
- Owen has netted the dark-winged moth but with Darwin you manage to free it.
- Finally you travel to Ethiopia 7 million yrs ago where you see the first ape to use a tool.
- Owen threatens to shoot the monkey. You let off a ship’s cannons, which knocks a tree onto Owen.
- You return to the present day – half an hour before school. You get to school on time, and Miss Hargreaves is impressed by the fossil Darwin first gave you on the beach.

Characters:

- **Dad** – like you, he’s clumsy and has a good sense of direction
- **Mrs Hargreaves** – the science teacher
- **Charles Darwin** – Darwin published Origin of Species in 1859; it was only fully accepted in the 20th C.
- **Richard Owen** – Owen was a biologist and an outspoken critic of Origin of Species

Locations:

- **Plymouth** – HMS Beagle sailed from Plymouth
- **HMS Beagle** – Darwin’s voyage took 5 years, going the whole way round the southern hemisphere
- **Saudi Arabia (5 million yrs ago)**
- **Victorian London**
- **Ethiopia (7 million yrs ago)**

Glossary:

- **Fossil** – the imprint of a pre-historic animal or plant (for example on a rock)
- **Characteristic** – a feature of an animal/plant (e.g. blue eyes... fins... a hump)
- **Adaptation** – the process of animals/plants changing to suit their environments
- **Evolution** – well-adapted animals/plants survive to pass on favourable characteristics to their offspring; thus over time these animals/plants change radically (e.g. ape to human)
- **Theory** – an idea which explains something
- **Mutation** – a random change in DNA which results in a new characteristic

Discussion Questions:

Story & Factual:

- What was the name of Darwin's ship?
- How are fish adapted to the sea? Or birds to the sky?
- People call Darwin's theory 'survival of the fittest'. Explain this, using the baby camels as an example.
- Why did Richard Owen want to kill the well-adapted animals?
- Why had pollution in London affected the evolution of the moth?
- How could you tell the ape in Ethiopia was intelligent?
- What was the name of Darwin's book? On The Origin of....?
- Name something that happened in the script that is *not* scientifically possible/accurate.

PSHE & Philosophical

- Why did many Victorian people disagree with Darwin?
- How do you feel about the fact that you evolved from a monkey? (and originally from the ocean?)
- The Torah, Bible and Quran have their own creation myths (as do most religions). Is it possible to be a Jew/Muslim/Christian and also accept Darwin's theory of evolution?
- What particular characteristic of humans has allowed them to thrive on earth?
- We are born with certain characteristics (e.g. brown hair, very athletic). But can we *gain* characteristics?
- If you could evolve a new characteristic, what would it be?

Resources:

You'll find these follow up resources on your shared drive:

- **Literacy Resources** – Punctuation & Grammar; Reading; Creative Writing tasks
- **Photo Storyboard** – order the images from the story (or use them for other things – e.g. writing)
- **Quick Quiz** – re-cap key facts
- **Or try some recount, report or creative writing ideas of your own!**