Science– Evolution and Inheritance – Year 6 Spring Term

Prior Learning:

Years 2, 3 and 4:

- Identify that most living things live in habitats to which they are suited
- Describe how different habitat provide for basic needs of different animals and plants
- Plants and animals depend on each other
- How fossils are formed when dead organisms are trapped within rock
- Environments can change and this can pose dangers

Key Vocabulary

offspring	A person's child or children/an animal's offspring
variation	A change or slight difference
characteristic	Typical or distinctive feature
adaptation	Ability of a species to survive because of changes in form or behaviour
environment	Surroundings or condition in which a person, animal or plant lives
inherit	To gain a quality or characteristic genetically from parent or ancestor
fossil	Remains or impression of a prehistoric plant or animal embedded in rock and preserved
evolution	Process by which living organisms have developed from earlier forms during the history of Earth

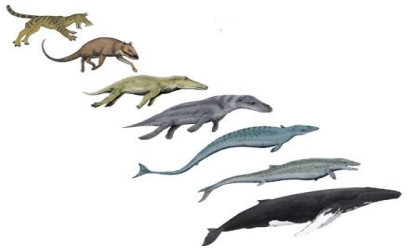
Charles Darwin (1809-1882)

British naturalist who wrote 'Origin of the Species' about natural selection.

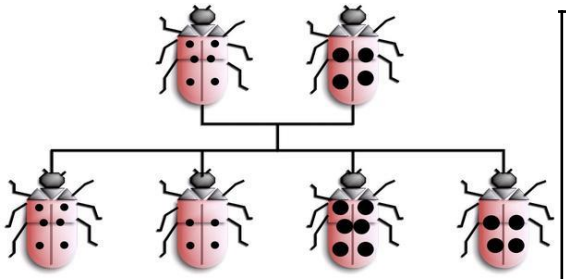
Anne McLaren FRS (1927-2007)

Ground-breaking work led to the birth of first 'test tube' baby.

Charles Darwin concluded that species must evolve. Each species is competing for scarce food and must adapt to secure food to survive and produce offspring. Those that adapt best will survive, those that don't will become extinct.



Animals adapt to their environment but certain advantages an animal may have can mean a sacrifice in others. For example, cheetahs can run at great speeds for only a short time before they run out of stamina and, as a result, it might not have a successful hunt.



Some characteristics are inherited from our parents through our genes (e.g. eye colour, hair colour) while other characteristics come from choices we make and the way that we live.

Evidence for evolution can be found in fossils and bones. The order that bones join up is the same in all mammals only the proportions are different. These show that mammals all descended from a common ancestor.

Key Facts

- All living things have offspring of the same kind
- Features in offspring are inherited from the parents but they are not identical to parents and can vary
- Plants and animals have characteristics that make them adapted to their environment
- If environment changes rapidly some variations of a species may not survive
- If environment changes slowly animals and plants with variations best suited survive to become dominant
- Over a very long period of time characteristics may change so much a new species is created = evolution
- Fossils give us evidence of what lived millions of years ago and support the theory of evolution

Can I answer:

How have living things changed over time?

How do fossils provide information about living things that inhabited the Earth millions of years ago?