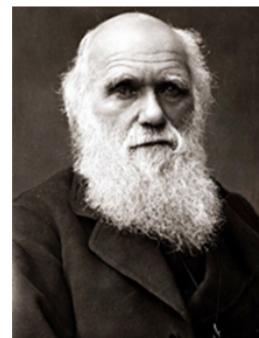


What should I already know?

- That living things produce offspring
- Fossils are very old and provide information about living things
- Characteristics are passed on (eg. likeness of children to parents)

Scientific Skills and Enquiry

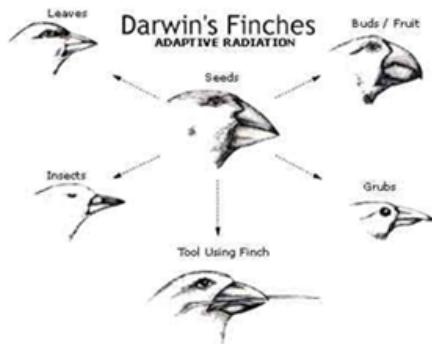
- Research the work of Charles Darwin and Mary Anning.
- Identify scientific evidence that has been used to support or refute ideas
- Use relevant scientific language to discuss, communicate and justify ideas
- Draw conclusions from practical experiments and make links to findings and wider scientific theories

Charles Darwin

Charles Darwin was a naturalist, geologist and biologist most famous for his **Theory of Evolution**.

What should I know by the end?

- Evolution is a process of change that takes place over many generations
- Fossils provide information about living things that inhabited the Earth millions of years ago
- Palaeontologists can compare similarities and differences in fossils
- Charles Darwin established the Theory of Evolution
- Natural selection is the process by which species adapt to their environment
- Living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Species evolve over time – this is caused by inheritance and mutations
- Inheritance is what is passed on from one generation to the next
- To identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.
- Adaptation is when animals and plants have evolved so that they have adapted to survive in their environments.

Diagram of Adaptive Evolution**Vocabulary**

Ancestor – a parent or parent of a parent
Adaptation – an alteration in an organism to better survive in its environment
Environment – the relationship between organisms and the natural world
Fossil – the preserved remains of a prehistoric organism
Evolution – the change in genetic make-up over successive generations

Mary Anning's Ichthyosaurus

Extinct – the death of the last individual of the species
Generation – a single step in the line of descent from an ancestor
Inheritance – the process in which genetic information is passed from a parent to child
Mutation – changes in the genetic sequence
Natural selection – the process where organisms with favourable traits are more likely to reproduce.
Species – a group of animals that can reproduce with one another
Theory – a fact supported by explanation of some aspect of the natural world
Variation – differences between individuals within a species