



Science



Knowledge organiser – Evolution and inheritance (UKS2)

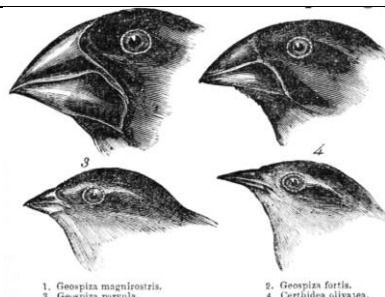
What will we be learning?

All living things have offspring of the same kind, as features in the offspring are inherited from the parents. Due to sexual reproduction, the offspring are not identical to their parents and vary from each other.

Plants and animals have characteristics that make them suited (adapted) to their environment. If the environment changes rapidly, some variations of a species may not suit the new environment and will die. If the environment changes slowly, animals and plants with variations that are best suited survive in greater numbers to reproduce and pass their characteristics on to their young. Over time, these inherited

Key knowledge

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.



Key Vocabulary	Possible Evidence
Offspring, sexual reproduction, vary, characteristics, suited, adapted, environment, inherited, species, fossils	<ul style="list-style-type: none"> <input type="checkbox"/> Can explain the process of evolution <input type="checkbox"/> Can give examples of how plants and animals are suited to an environment <input type="checkbox"/> Can give examples of how an animal or plant has evolved over time e.g. penguin, peppered moth

Common Misconceptions

Some children may think:

- adaptation occurs during an animal's lifetime: giraffes' necks stretch during their lifetime to reach higher leaves and animals living in cold environments grow thick fur during their life
- offspring most resemble their parents of the same sex, so that sons look like fathers
- all characteristics, including those that are due to actions during the parent's life such as dyed hair or footballing skills, can be inherited
- cavemen and dinosaurs were alive at the same time.