

Principles of Science:

- We ask questions
- We explore and investigate
- We use scientific vocabulary
- We make links with other subjects
- We have fun!

Topic Overview: Evolution and Inheritance

Building on what they learned about fossils in the topic on rocks in Year 3, pupils should find out more about how living things on Earth have changed over time. They should be introduced to the idea that characteristics are passed from parents to their offspring, for instance by considering different breeds of dogs, and what happens when, for example, Labradors are crossed with poodles. They should also appreciate that variation in offspring over time can make animals more or less able to survive in particular environments, for example, by exploring how giraffes' necks got longer, or the development of insulating fur on the arctic fox.

Note: At this stage, pupils are not expected to understand how genes and chromosomes work.

SCIENC
E Year 6



Autumn 1

Focus scientists:

Charles Darwin

Objectives:

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago ^[1]_[SEP]
- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents ^[1]_[SEP]
- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. ^[1]_[SEP]

Work scientifically by:

- observing and raising questions about local animals and how they are adapted to their environment
- comparing how some living things are adapted to survive in extreme conditions, for example, cactuses, penguins and camels. They might analyse the advantages and disadvantages of specific adaptations, such as being on two feet rather than four, having a long or a short beak, having gills or lungs, tendrils on climbing plants, brightly coloured and scented flowers.

Writing opportunities:

Evolution newspaper report

Key vocabulary:

natural selection
characteristics evidence
fossils parent
offspring inherit
inherited characteristic
environmental characteristic
adapt adaptation
evolve environment
species breed

Learning Outcomes/ Assessment

Emerging	Secure	Exceeding
<ul style="list-style-type: none"> • <i>Observe object/living things/event and comment on it</i> • <i>Notice similarities and differences in order to group and compare objects, living things and events</i> • <i>Link cause and effect; recognise patterns and relationships</i> • <i>Give simple explanations, mostly using everyday language or superficial use of scientific language</i> 	<ul style="list-style-type: none"> • <i>Show understanding of a concept by using scientific vocabulary correctly</i> • <i>Apply knowledge in familiar related contexts</i> 	<ul style="list-style-type: none"> • <i>Create links to other curriculum areas</i> • <i>Apply knowledge in unfamiliar context</i>

*Write names of chn in appropriate column.