What should I already know?

●Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. (Y2 - Living things and their habitats)

• Notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals, including humans)

• Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)

• Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks)

• Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats)

• Describe the life process of reproduction in some plants and animals. (Living things and their habitats - Y5)

Key Vocabulary and Definitions:

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| --- | --- |
| Acquired traits | Feature caused by the environment |
| Adaptations | A feature that helps a living thing survive in its environment |
| Cells | What living things are made up of |
| DNA | Strands of genes joined together |
| Evolution | The change in a species over long periods of time |
| Genes | Small section of DNA or chromosome |
| Inherited traits | Physical feature we inherit from our parents |
| Selective breeding | Animal and plant breeding to selectively develop particular traits |
| Variation | Different or distinctive form of something |

Scientific Knowledge

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 characteristics become more dominant within the population. Over a very long period of time, these characteristics may be so different to how they were originally that a new species is created. This is evolution.

Fossils give us evidence of what lived on the Earth millions of year ago and provide evidence to support the theory of evolution. More recently, scientists such as Darwin and Wallace observed how living things adapt to different environments to become distinct varieties with their own characteristics.

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Teaching Sequence

1. To explain the difference between acquired and inherited traits
2. To describe and give examples of adaptations
3. To explain the Theory of Evolution by Charles Darwin
4. To describe the different types of evidence used to support the Theory of Evolution
5. To understand how human beings have evolved
6. To Identify scientific evidence that has been used to support or refute ideas or arguments (fossil record)

Blooms Taxonomy – Specific Verbs to Use in Lesson Aims

Knowledge: Describe, find, identify, list, locate, name, recognise, retrieve Comprehension: Classify, compare, explain, infer, interpret, paraphrase, summarise Application: Carry out, implement, use Analysis: Deconstruct, Organise, outline, structure Synthesis: Construct, design, devise, invent, make, plan, produce, Evaluation: Appraise, assess, choose,



Key Knowledge

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| --- | --- | --- | --- |
| Term 5/6 | Let’s Talk (Explorify) | Scientific Knowledge | Scientific Skill |
| Lesson 1 | <https://explorify.uk/en/activities/whats-going-on/takeaway-dinner> | recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago | **Interpret and report** |
| Lesson 2 | <https://explorify.uk/en/activities/whats-going-on/extremophile-snottites> | identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution | **Interpret and report****Observe and measure**  |
| Lesson 3 | <https://explorify.uk/en/activities/whats-going-on/on-thin-ice>  | recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents | **Interpret and report** |
| Lesson 4 | [Found it difficult to spot an animal because of its colour? - Explorify](https://explorify.uk/en/activities/have-you-ever/found-it-difficult-to-spot-an-animal-because-of-its-colour) | recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents | **Observe and measure****Evaluate**  |
| Lesson 5 | <https://explorify.uk/en/activities/whats-going-on/super-seeds>  | identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution | **Observe and measure** |
| Lesson 6 | <https://explorify.uk/en/activities/whats-going-on/alien-shapes>  | recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago | **Evaluate** |
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