

**Pentecost 1**  
**Science Year 6: Evolution and Inheritance (Biology)**

**Scripture Link:** *Psalm 37:29/ Matthew 19:29*

**National Curriculum Objective**

**Enquiry Question: What is evolution?**

	Lesson 1	Lesson 2	Lesson 3
<b>Learning intention for each lesson</b>	To know what extinction is, that we can learn more from fossils and that things adapt and change over time.	Know who Charles Darwin was and his significance. Know Darwin's theory of Evolution.	Know what natural selection is and how this promotes adaptation.
<b>Recall and Retrieval</b>	Can describe what a fossil is and how they are made Can describe some of the ways humans impact upon the environment.	Know what extinct means and can name some extinct species. That conservation refers to protecting our environment and the wildlife that lives in it. It includes looking after biodiversity and the health of the planet. That Conservation aims to protect species from extinction through maintaining habitats and ecosystems that may be under threat from humans or natural events	know that Charles Darwin was a naturalist know that a naturalist is someone who studies things in nature such as animals and plants and how they live Can define extinction.
<b>Sequence of substantive knowledge throughout the lesson</b>	I know that extinct means: no living members of a species.  I know that saber-toothed cats, dodos, mammoths, ground sloths, and golden toads are examples of extinct species.	I know that Charles Darwin was a naturalist  I know that a naturalist is someone who studies things in nature such as animals and plants and how they live.	I know that natural selection refers to 'the survival of the fittest'.  I will know that the best adapted organisms are able to survive.  I will know that Scientists have used fossils to look at how organisms have evolved over time..
<b>Key Skills/disciplinary knowledge</b>	<ul style="list-style-type: none"> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes</li> </ul>	<ul style="list-style-type: none"> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> </ul>	<ul style="list-style-type: none"> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>
<b>Key Vocabulary</b>	Offspring, sexual reproduction, vary, variation, characteristics, suited, adapted, environment, inherited, species, fossils, adaptation, acquired	Offspring, sexual reproduction, vary, variation, characteristics, suited, adapted, environment, inherited, species, fossils, adaptation, acquired characteristic, inherited characteristic, gene, natural selection, artificial selection.	Offspring, sexual reproduction, vary, variation, characteristics, suited, adapted, environment, inherited, species, fossils, adaptation, acquired characteristic, inherited characteristic, gene, natural selection, artificial selection.

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<b>Main teaching activity</b> <i>If the school has another short term planning format, this does not need to be included.</i>			
<b>Scaffolding</b>			
<b>Challenge</b>			
<b>Diversity Links</b>			
<b>Catholic Social Teaching Principles</b>	Stewardship – Seeing God in creation		Stewardship – Seeing God in creation
<b>British Values</b>			
<b>Wider links</b>			

**Pentecost 1**  
**Science Year 6: Evolution and Inheritance (Biology)**

	Lesson 4	Lesson 5	Lesson 6
<b>Learning intention for each lesson</b>	Know how some plants have adapted to a changing or different environment	Know what genetic mutation is and its effect on future generations.	Know what inheritance means in regards to evolution.
<b>Recall and Retrieval</b>	know that natural selection refers to 'the survival of the fittest'. know that the best adapted organisms are able to survive. know that Scientists have used fossils to look at how organisms have evolved over time	Can explain what a biome is and name examples. Can describe what plants need to survive. know what a habitat needs to provide	Know what is meant by metamorphosis. know that genetic mutation refers to a change in one or more genes. know that some mutations can lead to genetic disorders or illnesses.
<b>Sequence of substantive knowledge throughout the lesson</b>	I will know that all plants are adapted to certain conditions,  I will know that the conditions that can cause adaptations include: temperature, available water, soil type, and interactions with animals and other organisms.	I will know that genetic mutation refers to a change in one or more genes.  I will know that some mutations can lead to genetic disorders or illnesses.	I will know that inheritance refers to when living things reproduce they pass on characteristics to their offspring.
<b>Key Skills/disciplinary knowledge</b>	<ul style="list-style-type: none"> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<ul style="list-style-type: none"> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>	<ul style="list-style-type: none"> <li>reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations;</li> <li>identifying differences, similarities or changes related to simple scientific ideas and processes;</li> <li>identifying scientific evidence that has been used to support or refute ideas or arguments</li> </ul>
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<b>Scaffolding</b>			
<b>Challenge</b>			
<b>Diversity Links</b>			
<b>Catholic Social Teaching Principles</b>	Stewardship – Seeing God in creation	Human Dignity – we are all loved unconditionally and challenged to love unconditionally.	Human Dignity – we are all loved unconditionally and challenged to love unconditionally.
<b>British Values</b>			
<b>Wider curriculum links</b>			