

# Evolution and Inheritance : Science : Year 6

	Learning Objective	Overview	Assessment Questions	Resources
<b>Lesson 1</b>	To recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	Children will learn about traits that are passed from one generation by the next, and consider ways in which some inherited characteristics may vary. They may then identify ways in which families or groups of people have some similar or shared characteristics.	<ul style="list-style-type: none"> <li>Do children recognise that animals produce offspring that are like themselves?</li> <li>Can children explain why variation in offspring occurs?</li> </ul>	<ul style="list-style-type: none"> <li>Slides</li> <li>Worksheets 1A/1B/1C</li> <li>Family Traits</li> <li>Inherited Characteristics (FSD? activity only)</li> </ul>
<b>Lesson 2</b>	To identify how animals and plants are adapted to suit their environment in different ways.	Children will learn about how random mutations may or may not be passed from one generation to the next, and how this process results in variation. They will then consider whether certain variations are advantageous, giving reasons why.	<ul style="list-style-type: none"> <li>Can children describe the conditions of an environment?</li> <li>Can children identify characteristics which help an organism to be well suited to its environment?</li> <li>Do children understand why different organisms in the same environment may have different characteristics?</li> </ul>	<ul style="list-style-type: none"> <li>Slides</li> <li>Worksheets 2A/2B/2C</li> <li>Environment Posters</li> <li>Advantageous Adaptations sheet (FSD? activity only)</li> </ul>
<b>Lesson 3</b>	To understand that adaptation of plants and animals to suit their environment may lead to evolution.	Children will learn about how, if traits are advantageous to a species, they may be passed on and that evolution can occur. They may then undertake some of a range of activities where they will identify advantageous traits of species, learn more about evolutionary scientists, or sequence description of evolutionary processes.	<ul style="list-style-type: none"> <li>Do children know that not all inherited characteristics are advantageous?</li> <li>Can children explain why advantageous characteristics are more likely to be passed from generation to generation?</li> <li>Do children understand that whole species can evolve in this way?</li> </ul>	<ul style="list-style-type: none"> <li>Slides</li> <li>Task Charts 3A/3B/3C</li> <li>Task Instructions</li> <li>Task Resources A-F</li> </ul>
<b>Lesson 4</b>	Evolution and Inheritance: Darwin	Children will learn about the contributions of ancient Greek scientists to our understanding of evolution. They will also study in greater depth the work of Carl Linnaeus and, particularly, that of Charles Darwin.	<ul style="list-style-type: none"> <li>Do children know that our understanding of process of evolution has developed over time?</li> <li>Can children share what they have learned about the process of evolution?</li> <li>Can children share what they have learned about the life and work of Charles Darwin?</li> </ul>	<ul style="list-style-type: none"> <li>Slides</li> <li>Worksheets 4A/4B/4C</li> <li>Evolution Questions (FSD? activity only)</li> </ul>
<b>Lesson 5</b>	To recognise that living things have changed over time and that a number of factors can affect a species' evolution.	Children will learn about mutations, and how external factors can affect the evolution of a species. They will then either summarise their learning about how the fossil record provides evidence of this, or summarise given technical vocabulary in their own words, drawing on prior knowledge and learning.	<ul style="list-style-type: none"> <li>Do children understand that a species can change over time due to mutations?</li> <li>Do children understand that a species can change over time due to external factors such as competition from other species, disease or climate change?</li> </ul>	<ul style="list-style-type: none"> <li>Slides</li> <li>Worksheets 5A/5B/5C</li> <li>The Fossil Record</li> <li>Audio recorders (optional)</li> <li>Evolution and Inheritance Game (FSD? activity only)</li> <li>Die/Spinner, timer (FSD? activity only)</li> </ul>
<b>Lesson 6</b>	To understand how humans have evolved over time, and how human behaviour can affect change in species over time.	Children will learn about human adaptations which allow us to thrive, then consider some impacts of human behaviour on other species. They will then either discuss these impacts in greater depths, or discuss some beliefs and misconceptions about evolution.	<ul style="list-style-type: none"> <li>Do children know that primate species (including humans) have changed over time?</li> <li>Can children explain some ways in which human behaviour has changed the characteristics of other species?</li> <li>Can children identify positive and negative consequences of this human behaviour?</li> </ul>	<ul style="list-style-type: none"> <li>Slides</li> <li>Worksheets 6A/6B/6C</li> <li>Evolution Discussion Cards</li> </ul>