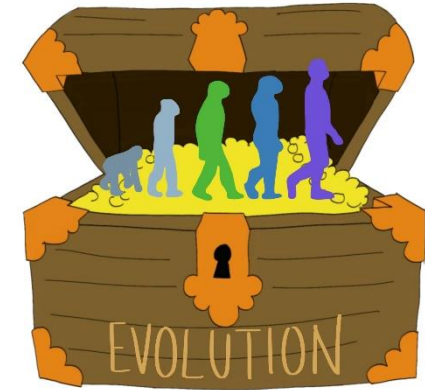


Year 6-Evolution

Term:	Spring 2
Subject focus:	Science and Design Technology
Non-Fiction:	Biography
Fiction:	Narrative with dialogue



Concepts	
Science	Design Technology
Nature	Innovate/Technique/Evaluate
<p>This term, pupils will begin by exploring and making comparison between the current world with pre-historic period including an understanding that the world was once a super continent called the 'Pangea', through the study of fossils. The children's knowledge of the different continents in the world will support their understanding of what the landmass was like millions of years ago, and how that compares to now. They will also come to this unit with a good understanding of the layers of the earth and how natural disasters, such as earthquakes and volcanoes occur.</p> <p>By analysing the advantages and disadvantages of specific adaptation, the children will further explore how animals and plants have adapted to suit their environment in different ways and how this may lead to evolutionary changes. Children's exploration into animals' adaptation, including those of prehistoric creatures, builds upon knowledge gained in topics such as <i>Into the Woods</i>, <i>In the Night</i>, <i>Saving Planet Earth</i> and <i>Desert Survival</i>.</p> <p>They will look into the work of famous palaeontologists such as Mary Anning and Charles Darwin, and discuss how their work has contributed to modern science.</p> <p>The D&T unit within this topic gives the children the opportunity to look at how insects and animals have been used in the past to embellish or adorn items of clothing or jewellery. Building on prior skills, the children will learn the skill of applique to create a small accessory, such as a brooch, inspired by Victorian insect jewellery.</p>	

Science

National Curriculum

<p>Science</p> <ul style="list-style-type: none"> • I can explain that the kind of living things that live on the earth now are different from those that inhabited the Earth millions of years ago and that fossils provide this information • I can explain that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • I can give examples of how animals and plants are adapted to suit their environment in different ways and can explain that adaptation may lead to evolution 	<p>Design technology</p> <ul style="list-style-type: none"> • I can use research I have done into famous designers and inventors to inform my designs • I can generate, develop, model and communicate my ideas through discussions, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design • I can apply my knowledge of materials and techniques to refine and rework my product to improve its functional properties and aesthetic qualities • I can use my technical knowledge and accurate skills to problem solve during the making process • I can use my knowledge of famous designs to further explain the effectiveness of existing products and products I have made 	<p>Computing</p> <ul style="list-style-type: none"> • I understand how to protect my computer or device from harm on the internet • I understand how to report concerns about content and contact in and out of school • I can recognise trustworthy sources of information on the internet • I can use a broad range of resources online to find exactly what I am looking for
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Year 6

Science

Evolution and Inheritance

Foundation subject Knowledge and skills

<p>What are the main concepts and what do we need to know?</p>	<ul style="list-style-type: none"> • Know that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents • Know that traits that are passed from one generation by the next, and know that some inherited characteristics may vary • Know how animals and plants are adapted to suit their environment in different ways • Know how random mutations may or may not be passed from one generation to the next, and how this process results in variation • Know that adaptation of plants and animals to suit their environment may lead to evolution • Know that if traits are advantageous to a species, they may be passed on and that evolution can occur • Know about mutations, and how external factors can affect the evolution of a species • Know about prehistoric periods and the animals/dinosaurs that lived on earth at that time • Know theories linked to the extinction of dinosaurs
<p>How can we inquire into this scientific concept</p>	<ul style="list-style-type: none"> • Identify ways in which families or groups of people have some similar or shared characteristics • Identify advantageous traits of species and sequence description of evolutionary processes • Know how the fossil record provides evidence • Observe and raise questions about local animals • Know how they are adapted to their environment

	<ul style="list-style-type: none"> • Compare how some living things are adapted to survive in extreme conditions • Analyse the advantages and disadvantages of specific adaptations
How this effects today's world	<ul style="list-style-type: none"> • Learn more about evolutionary scientists • Know about the contributions of ancient Greek scientists to our understanding of evolution. • Know the work of Carl Linnaeus and that he divided animals into 6 classes: mammals, birds, amphibians, fish, insects and worms • Know the work of Charles Darwin and that he discovered that animals adapt to their environments over time • Know that living things have changed over time and that a number of factors can affect a species' evolution • Know the work of palaeontologists and how they have developed understanding of evolution • Know the work of famous palaeontologist Mary Anning • Know what species of animals are descendants of dinosaurs
How can we apply what we know to think about the future?	<ul style="list-style-type: none"> • Know how humans have evolved over time, and how human behaviour can affect change in species over time • Know about human adaptations which allow us to thrive and consider some impacts of human behaviour on other species • Know the impact that humans are having on the planet and the effect that this is having on animals • Know what conservation is and how it attempts to keep animals from becoming extinct • Know what we can do as global citizens to help the prevention of animals becoming extinct
Design Technology	
Year 6 Design Technology Appliqué	
Year 6	<ul style="list-style-type: none"> • Explore the work of designers who use applique in their work • Understand how applique is applied and the effect it has • Understand the different techniques of using applique • Explore the different techniques used in applique • Design a product which incorporates the use of applique to embellish • Use techniques to make designed product • Explore and evaluate end product against design criteria

Writing Outcomes	
Non-Fiction	Fiction
Write about the life and work of Charles Darwin/Mary Anning	Text: The Lost World (extract) Continue writing from the known extract, including the use of reported and direct speech to move the story on