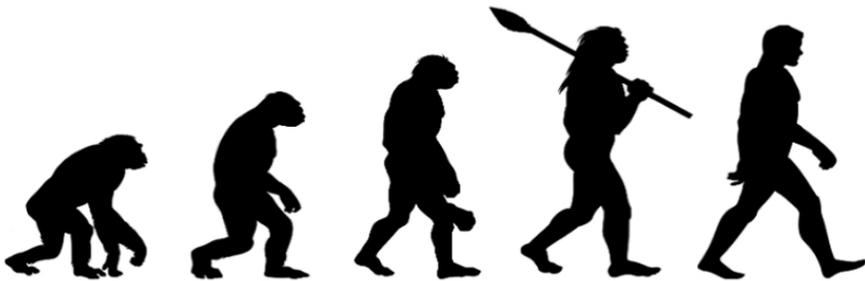


Challenge Pack

Story of Life

Learning Challenge

How can we educate children about evolution and inheritance effectively?



Hooks or memorable experiences

*Making fossils
Double DNA sequence
representations
Library visit for research skills*

Public Product – what will the outcome look like to demonstrate learning?

We will share our learning in the form of collated year group work with other Year groups.

Class texts- whole class reading, extracts, thematic books

*Stone girl, bone girl by Laurence Anholt
Magic of Reality, Richard Dawkins (extracts from)
Charles Darwin- non fiction*

Cognitive skills / meta-learning – specific teaching examples to use in learning

Consider All Factors (CAF): Where did Humans come from?

First Important Priorities (FIP):

*Consequences (C&S): Short and long term impact of changes in the environment.
How have human changes impacted upon the environment?*

Killer Questions- those asked to measure understanding of pupils at key milestone points during the term

How do we know other species walked the Earth?

How are fossils made?

How has an animal adapted to its environment?

What is evolution?

Year Group	6	Term	Spring	Challenge pack	Story of Life	
SUBJECT FOCUS (Delete as required)	Children will learn about/ will know WHAT? (Declarative knowledge)			Children will know HOW To...? (Procedural knowledge)	Prior learning (Schemata)	Vocabulary
Science	<p>What is natural selection? the process whereby organisms better adapted to their environment tend to survive and produce more offspring.</p> <p>How do animals adapt to their environment? An adaptation is a way an animal's body helps it survive, or live, in its environment.</p> <p>Where do we inherit our features from? We inherit our genetic code from our parents.</p> <p>How are fossils formed? They are formed when a plant or animal dies in a watery environment and is buried in mud and silt</p> <p>How do Humans affect evolution? Selecting specific genes and breeding certain animals for intended goals.</p> <p>Why have certain animals become extinct? Due to habitats being destroyed, diet becoming extinct, failure to adapt or being introduced to new diseases.</p> <p>To explain what evolution is. Evolution is the change in the characteristics of a species over several generations.</p>			<p>Explaining mutation. How to identify the physical characteristics over time Identifying features that we have inherited from our parents. To understand the process of fossil formation. To identify how Human decisions have impacted upon the environment.</p>	<p>describe in simple terms how fossils are formed when things that have lived are trapped within rock</p>	<p>Extinct Species Adapt Prey/predator Habitat Mutation Fossil evolution</p>
History	How does the make-up of a fossil teach us about how they might have lived in the past?			<p>6.4a Use different evidence to draw various conclusions about the past 6.4b Describe why a number of things may have changed over a period of time</p>		
ICT and Computing (include Apps and digital pencil case)	How can we present information in an easy-to-digest way?			6.1 Present information purposefully		Word process
Geography	<p>What are the different biomes across the planet? Children will know how to locate specific locations on an atlas.</p>			<p>6.2 Explain key differences between places due to their physical geography 6.5 Use 6 figure grid references to locate features</p>		<p>Biomes Polar</p>
Art	<p>Spring 1 or 2 - PROJECT - EVOLUTION (Create a picture or sculpture of a monkey using a variety of mediums) Ongoing project</p> <ul style="list-style-type: none"> •Children are to create a sketch book, record, revisit and review their ideas •Refer to artists, architects and designers in history to explain choices •They must choose from a range of materials mixed media (e.g. pencil, pens, charcoal, paint, collage, clay) •They then need to create a product that reflects a chosen artist, architect or designer or their own chosen one •Students are to refer to sketch books and use them for planning 			<ul style="list-style-type: none"> •A3.1a Question and make thoughtful observations, compare ideas methods and approaches in their own and selected artists work •A3.1b Know about and draw inspiration from a range of artists or cultures to influence their own work. Explore the roles and purposes of artists, craftspeople and designers working in different times and cultures. 		<p>Hues Tone Contrast Complimentary Warm Cool Texture Cross hatch Shade Gradient</p>

	<p>Use knowledge of different types of paint to choice the one most suitable. Review and revisit their work. See all skills taught across from Year 3-5. Children should be able to confidently use knowledge and skills</p> <p>Inspiration: Charles Darwin – Evolution picture Banksy – Monkey Parliament links to Reading comprehension and current world issues</p> <p>Questions: Which artist(s) have inspired you? Why have you chosen a particular medium? Can you explain how you have used line, tone, texture and patterns to add depth? Can you explain your colour choices/</p>	<p>•A3.5a Adapt work in response to personal and group critique, describing how they will develop it in future. •A3.5b Describe techniques used, evaluating how they could be performed more effectively.</p>		<p>Contour</p> <p>*See Art vocab list for more</p>
Design Technology	<p>Spring 1 or 2 – Standalone project</p> <p>Cooking and Nutrition: Can we create a healthy recipe for children taking exams? Children to create and make their own healthy salad. Research the importance of healthy diet and the nutritional benefits it will have on a child taking exams.</p> <p>Can you explain where and how a range of food products are sourced from? Can you explain the nutritional benefits of your recipe?</p>	<p>D3.5a Explain and apply the principles and importance of a healthy, varied diet D3.5b Set out my own cooking process including the recipe, instructions and how to practice effective food hygiene D3.5c Use a range of cooking techniques resulting in the production of a quality product D3.5d Describe seasonality and how this influences food products available D3.5e Know where and how a range of products are grown, reared, caught or processed</p>		<p>Chop Slice Peel Grate Vegan Gluten free Vegetarian Pescatarian GMO Dietary Savoury</p>
Relationships to core subjects (Maths, English, Science)	<p>Biography- Mary Anning</p>			
PSHE	<p>How are we similar/ different to each other?</p>	<p>L3.1 I can celebrate differences between my uniqueness and others</p>		
Music	<p>Unit- Listening to and appreciating classical music</p> <p>Spring 1 Firebird by Stravinsky</p> <ul style="list-style-type: none"> Listen with attention to detail and recall sounds with increasing aural memory Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians Develop an understanding of the history of music. <p>Spring 2 Flight of the bumblebees by Rimsky-Korsakov</p> <ul style="list-style-type: none"> Listen with attention to detail and recall sounds with increasing aural memory Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians Develop an understanding of the history of music. 	<p>M3.4a I listen to a wide variety of musical genres and comment using a range of musical vocabulary. M3.4c I can begin to identify works by the great composers M3.4d I listen to a wide variety of music and identify the musical genres. M3.4e I can use musical vocabulary confidently to describe the music I am listening to.</p>	<p>Listening and appreciating music during assembly time.</p> <p>Listening to music of a similar genre during performance lessons</p>	<p><u>Spring 1</u> Pianissimo Piano Forte Moderato forte Moderato piano Fortissimo Dynamics Crescendo Fanfare <u>Spring 2</u> <u>As above</u> New vocabulary Tempo Largo Andante Allegretto /Allegro</p>