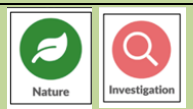
<table>
<tr><td colspan="4">National curriculum objectives:
I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

I can describe the life process of reproduction in some plants and animals.</td></tr>
<tr><td colspan="2"><u>Strand of science</u>: Biology  </td><td><u>Unit of science</u>: Living things and their habitats.</td><td><u>Significant Scientist</u>: David Attenborough</td></tr>
<tr><td colspan="2"><u>Unit enquiry question:</u> What's the same and what's different about living things?</td><td colspan="2"><u>Endpoint of the unit:</u> Biography of a Naturalist</td></tr>
<tr><td colspan="2"><u>Science conversation station experiment:</u></td><td colspan="2"><u>Jobs and careers associated to this strand of science:</u>

Botanical Scientist, Organic farmer. Floriculturist</td></tr>
<tr><td>Working scientifically skill</td><td>Indicative content</td><td>Outcomes -Knowledge the children will know.</td><td>Enquiry type:</td></tr>
<tr><td>I can report and present my findings using speaking and writing including displays and presentations.</td><td>L1. Who are some significant scientists and what have they contributed?

• Observe photos of naturalists. Partner talk.
• Explain they are naturalists. What do you think a naturalist is?
• Why are naturalists so important?
• Talk about Eva Crane.
• Talk about Sarah Fowler.
• Talk about Sir David Attenborough.</td><td>Chn will know about a range of Naturalists and their achievements.</td><td>• Observation over time.
• Research.
• Pattern seeking.
• Identifying, grouping and classifying.
• Problem-solving.
• Comparative and fair testing</td></tr>
</table>

	Name other naturalists (Steve Urwin, Charles Darwin, Jane Goodall…)		
Key Vocabulary Naturalist Scientist Conservation Preservation Legacy Impact Significance	**Sentence stems** The fact is……because… Given that……then…… I deduce/deduct…… I have worked out…… In conclusion…… I conclude…… Next time I could / will….because		Maths links and opportunities
Working scientifically skill	**Indicative content**	**Outcomes -Knowledge the children will know.**	**Enquiry type:**
I can use relevant scientific language.	L2. How do plants reproduce? • Discuss Asexual and Sexual reproduction. • Explore parts of a plant. • Explore male/female parts. • Discuss pollination. Sentence outcome of how flowers can be pollinated.	Explain two ways in which plants can be pollination (wind, insects).	• Observation over time. • Research. • Pattern seeking. • Identifying, grouping and classifying. • Problem-solving. • Comparative and fair testing
Key Vocabulary **Plant** **Reproduction** **Sexual**	**Sentence stems** My prediction supported / did not support / confirmed…		**Maths links and opportunities**

Asexual **Gamete** **pollen**	The fact is…….because… Given that…….then…… I deduce/deduct…… I have worked out……		**<u>Transcription sentence</u>** **They teach people how to conserve and preserve the world.**
Working scientifically skill	**Indicative content**	**Outcomes -Knowledge the children will know.**	**Enquiry type:**
I can use scientific classification.	L3. How do we classify living things? • Sort things into two groups. • Discuss living and non living things. • Explain and define what a living thing is. • Classify and sort living things – different ways to do this. • Go through different groups of animals. • Minimize the groups to 5 classification and they match the definition to the classification and then apply that to the characteristics of the different types of living things.	They will know how to classify and give examples of characteristics of living and non living things	• Observation over time. • Research. • Pattern seeking. • Identifying, grouping and classifying. • Problem-solving. • Comparative and fair testing

<table>
<tr><td><u>Key Vocabulary</u>
Animal
Living
Classify
Sort
Characteristic</td><td colspan="2"><u>Sentence stems</u>
The possibilities are…..

I approached it by doing…

I would like to prove / disprove…..</td><td><u>Maths links and opportunities</u>
Table

<u>Transcription sentence</u>
Insects can carry pollen from one plant to another.</td></tr>
<tr><td>Working scientifically skill</td><td>Indicative content</td><td>Outcomes -Knowledge the children will know.</td><td>Enquiry type:</td></tr>
<tr><td>I can use relevant scientific language and illustrations</td><td>L4. What does the life cycle of a mammal look like?

• Recap mammals.
• Discuss stages of lifecycle of mammal.
Discuss three different types of mammals: placentals, monotremes and marsupials.</td><td>They can explain each part of the lifecycle and the process.</td><td>• Observation over time.
• Research.
• Pattern seeking.
• Identifying, grouping and classifying.
• Problem-solving.
• Comparative and fair testing</td></tr>
<tr><td><u>Key Vocabulary</u>
Reproduction
mammal
Live young
foetus
Adult
Life cycle
adolescent</td><td colspan="2"><u>Sentence stems</u>
The fact is…….because…

Given that…….then……

I deduce/deduct……

I have worked out……

In conclusion……

I conclude……</td><td><u>Maths links and opportunities</u>
Flow chart

<u>Transcription sentence</u>
N/A</td></tr>
</table>

Working scientifically skill	Indicative content	Outcomes -Knowledge the children will know.	Enquiry type:
I can use relevant scientific language and illustrations.	L5. What is metamorphosis like in amphibians? L5+ What is metamorphosis like in insects? • Discuss metamorphosis • Talk about animals that undergo metamorphosis • Explain that amphibians and insects are animals that undergo metamorphosis • Compare life cycles of insects and amphibians spotting similarities and differences in each individual lesson	They can explain the process of metamorphosis.	• Observation over time. • Research. • Pattern seeking. • Identifying, grouping and classifying. • Problem-solving. • Comparative and fair testing
Key Vocabulary L5 & L5+ Metamorphosis Amphibian Transform Lifecycle Egg	**Sentence stems** The fact is……..because… Given that……..then…….. I deduce/deduct…….. I have worked out…….. In conclusion…….. I conclude……..		**Maths links and opportunities** **Transcription sentence** **N/A**

Working scientifically skill	**Indicative content**	**Outcomes -Knowledge the children will know.**	**Enquiry type:**
I can use relevant scientific language and illustrations.	L6 What are the stages of the life cycle of a bird? • Rally robin – what is a bird, how many can you name? • Which statements apply to all birds? • Go into the stages of the life cycle. • Order the life cycle and discuss.	They can explain the different stages of the life cycle of a bird.	• Observation over time. • Research. • Pattern seeking. • Identifying, grouping and classifying. • Problem-solving. • Comparative and fair testing
Key Vocabulary **Bird** **egg** **Hatchling** **Fledgling** **adult**	**Sentence stems** The fact is……because… Given that……then…… I deduce/deduct…… I have worked out…… In conclusion…… I conclude……		**Maths links and opportunities** **Transcription sentence** Birds lay eggs but mammals give birth to live young.
Working scientifically skill	**Indicative content**	**Outcomes -Knowledge the children will know.**	**Enquiry type:**

I can report and present my findings.	L6. What contributions and impact has our chosen naturalist made? • Recap naturalists • Research Sir David Attenborough • Early life • Famous documentaries • Charities • Why his work is important His achievements	They will have knowledge of a significant scientist and their achievements.	• Observation over time. • Research. • Pattern seeking. • Identifying, grouping and classifying. • Problem-solving. • Comparative and fair testing
Key Vocabulary **Naturalist** **Conservation** **Preservation** **Impact** **legacy**	**Sentence stems**		**Maths links and opportunities** **Transcription sentence** His work is important because….