

Advent 2
Science Year 6: Living Things and their Habitats (Biology)

Scripture Link: Psalm 8: 7-8

National Curriculum Objective

Enquiry Question: How do things inside us work?

	Lesson 1	Lesson 2	Lesson 3
Learning intention for each lesson	To sort living things based on their observable characteristics.	To investigate a classification key	To explore the use of classification as a scientific tool.
Recall and Retrieval	Know what 'classification' means know what a producer, a predator and prey are – and name some examples Explain what a food chain is.	know how living things are classified into broad groups. know some common observable features, similarities and differences. – specifically leaves and some animals can describe similarities and differences.	know what a classification key can be used for. know how to use a classification key. know how to use a key to group mini-beasts Know what is meant by vertebrate and invertebrate.
Sequence of substantive knowledge throughout the lesson	I know how living things are classified into broad groups. I know some common observable features, similarities and differences. – specifically leaves and some animals	I know what a classification key can be used for. I know how to use a classification key. I know how to use a key to group mini-beasts	I know why scientists classify things. I know how to use the Linnaeus classification to classify some animals.
Key Skills/disciplinary knowledge	<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs; using test results to make predictions to set up further comparative and fair tests; 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; 	<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs; using test results to make predictions to set up further comparative and fair tests; 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; 	<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs; using test results to make predictions to set up further comparative and fair tests; 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;

Key Vocabulary	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering.	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering.	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, classify, classification, worms, flowering and non-flowering
Main teaching activity <i>If the school has another short term planning format, this does not need to be included.</i>			
Scaffolding	In groups, children to classify their leaves. They can use whiteboards or post it notes to add headings. Teacher may want a guided group to teach this skill if children cannot draw and record in a table (Y4 skill)	Children to work in groups to identify and group the minibeasts. Children to work in pairs with ID keys to identify the insect.	Children to use the key to find out the classification status of the animals on the worksheet. Children will need access to IT to find the genus and species.
Challenge	Children to sort leaves and represent in a sorting diagram	Teacher to model after children have found answer to ensure all children followed correctly. Children to choose how they will record their learning e.g. drawings, table.	Challenge – children to do some examples of their own.
Diversity Links			
Catholic Social Teaching Principles	Stewardship – Seeing God in creation		
British Values			
Wider links			

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Science Year 6: Living things and their habitats (Biology)

	Lesson 4	Lesson 5	Lesson 6
Learning intention for each lesson	To research an animal – with reference to classification.	To investigate microorganisms.	To investigate bacteria.
Recall and Retrieval	Know why scientists classify things know how to use the Linnaeus classification to classify some animals. can describe features of objects and group them accordingly	Know what a human needs to survive Know how humans can stay healthy Know the main food groups.	know what a microorganism is. know that some microorganisms can be bad for us. can name some of the factors that influence life expectancy: smoking, overeating, drug use, genetic conditions.
Sequence of substantive knowledge throughout the lesson	I know how to research an animal I know how to classify that animal.	I know what a microorganism is. I know that some microorganisms can be bad for us.	I know what bacteria is I know that there can be a link between some bacterium and food poisoning.
Key Skills/disciplinary knowledge	<ul style="list-style-type: none"> 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; identifying differences, similarities or changes related to simple scientific ideas and processes; 	<ul style="list-style-type: none"> planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate; 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; identifying differences, similarities or changes related to simple scientific ideas and processes; 	<ul style="list-style-type: none"> 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; identifying scientific evidence that has been used to support or refute ideas or arguments

Key Vocabulary	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, classify, classification, worms, flowering and non-flowering	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, microorganisms, classify, worms, flowering and non-flowering.	Vertebrates, fish, amphibians, reptiles, birds, mammals, invertebrates, insects, spiders, snails, worms, flowering and non-flowering, bacteria, bacterium, danger
Main teaching activity <i>If the school has another short term planning format, this does not need to be included.</i>			
Scaffolding	Children could write descriptive words rather than sentences.	STEM sentences to support writing a detailed prediction.	Children to complete experiment in small groups.
Challenge	Option 1- Write 'a' in books then the name with description. Option 2- Cut and stick in pictures with name above and written description below Option 3- Differentiated worksheet (Included)		Measurement collection sheet available in resources although not essential to record.
Diversity Links			
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British Values			
Wider curriculum links			