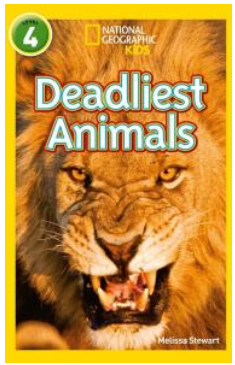
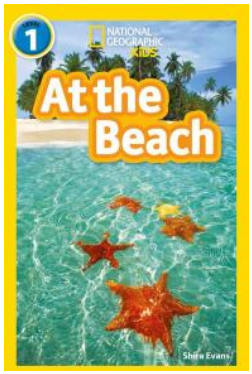
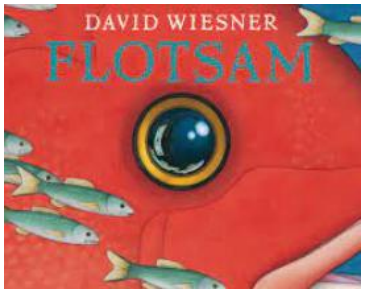
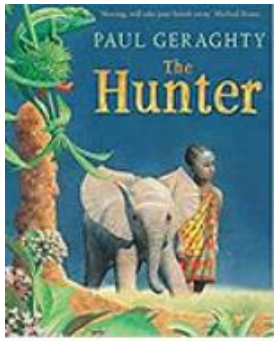
BILSTON CHURCH OF ENGLAND PRIMARY

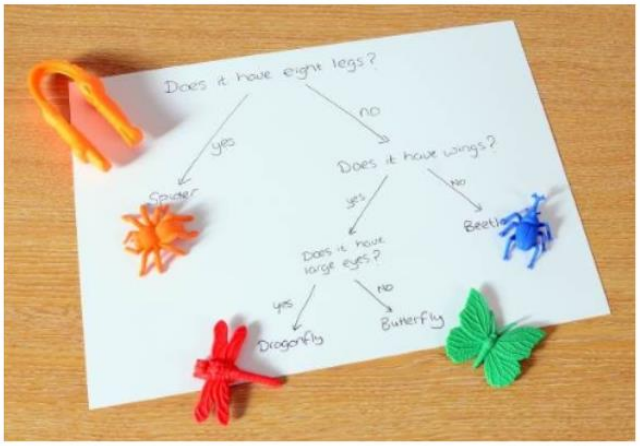
MEDIUM TERM PLANNING

Subject	Topic/Key Question	Year Group	Term	Time Allocation
Science	Who Am I - Classification	4	Spring 2	
 Reading scheme	 Reading scheme	 Library service	 Library	 Y5 Pathways
End of lower Key stage 2 Outcomes	Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests. Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.			

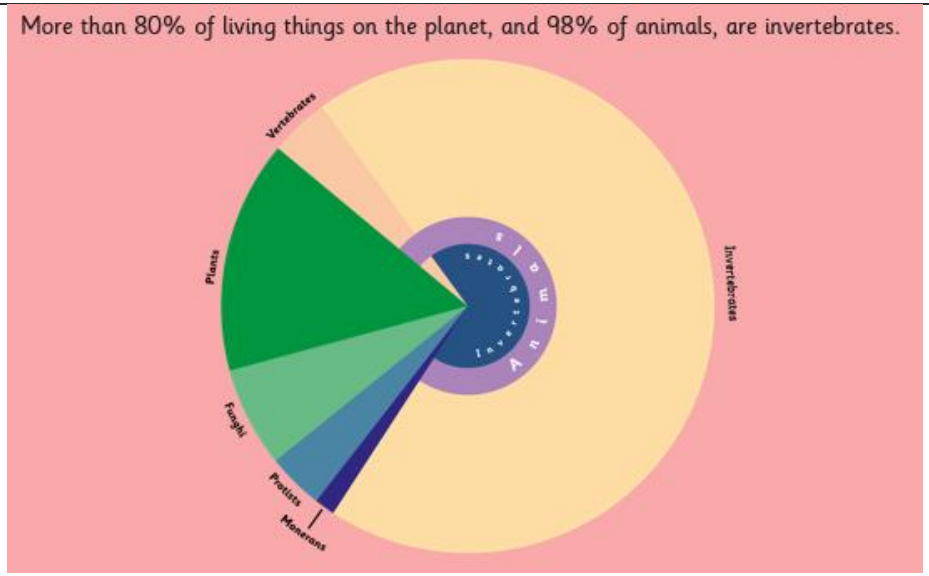
	Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions. Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Identifying differences, similarities or changes related to simple scientific ideas and processes. Using straightforward scientific evidence to answer questions or to support their findings.
End of Unit Outcomes	I can make careful observations of animals. I can follow a sequence of questions to identify an animal. I can ask yes/no questions that can help to sort a collection of animals. I can recognise features that can be used for sorting and identifying animals. an make careful observations of animals. I can use my observations to identify animals. I can identify questions that can be used to sort animals using their distinguishing features. I can describe the characteristics of fish, amphibians, reptiles, birds and mammals. I can decide to which group an animal belongs, based on its key characteristics. I can make careful observations of invertebrates. I can describe the characteristics of insects, arachnids (spiders), crustaceans, myriapods, molluscs and worms. I can decide to which group an animal belongs, based on its key characteristics.
Vocabulary	features, sequence, key, distinguish, similarities, differences, vertebrate, fish, amphibian, reptile, bird, mammal, backbone, hair, scales, feathers, eggs, wings, beak,

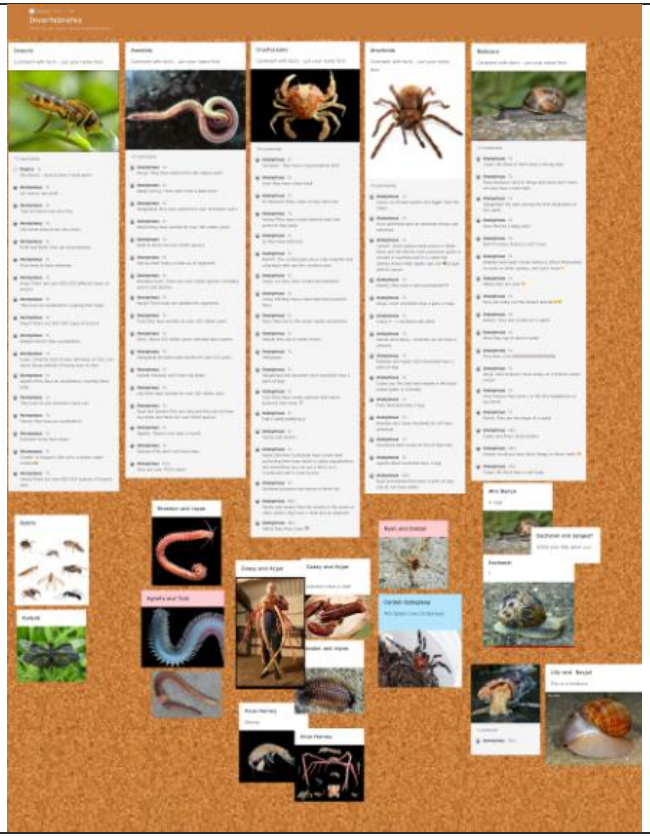
	lungs, gills, cold blooded, warm blooded, suckle, head, thorax, abdomen, wing, segment, antennae, insects, arachnids (spiders), crustaceans, myriapods, molluscs, worms, observations, sort, group, classify, identify

Lesson Sequence	Time Allocation	Key Question/WALT	Teaching Activities	Resources
Lesson 1 Who are you?	1 hour	**WALT:** identify pond/seashore animals using a key. **WILF:** I can make careful observations of animals. I can follow a sequence of questions to identify an animal. I can ask yes/no questions that can help to sort a collection of animals.	**Working Scientifically:** Making systematic and careful observations. They should choose the challenge based on previous experience of using keys. In this lesson children use keys to identify pond or seashore animals, and builds on their use of keys to sort rocks in Year 3, Module 2. It provides an opportunity for children to learn about a habitat that they may not have visited and will not necessarily be experiencing during this module (although a later visit would be beneficial). By the end of this lesson children will be able to identify an animal using a key and ask yes/no questions to distinguish between animals. In Lesson 2 children will visit a local water habitat, therefore this habitat should not be the focus of Lesson 1. • Share with the children the images of the aliens being sorted in a classification key. • Simplify the key with animal figures.	Collins connect lesson 1 Plastic farm animals.

		I can recognise features that can be used for sorting and identifying animals.	 • Give the children farm animal figures and ask them to classify and sort them. Model how you would do this first and then they have a go. This could be done in 2Question on Purple Mash which is a branching database. • Then introduce the children to the sea life classification tasks from Collins connect.	
Lesson 2 How are vertebrates grouped?	2 hour	**WALT:** classify vertebrates into groups using their key characteristics. **WILF:** I can describe the characteristics of fish, amphibians, reptiles, birds and mammals.	**Working Scientifically:** Identifying differences, similarities or changes related to simple scientific ideas and processes. In this lesson children learn the characteristics of the five vertebrate groups. By the end of this lesson they will be able to identify and explain why an animal is a fish, amphibian, reptile, bird or mammal. • Use the ppt from Twinkl – Classifying vertebrates. • Give the children picture cards for the five groups and ask the children to sort them. • Children to list the characteristics of the different animal groups. • Design a classification key for sorting the vertebrates.	Collins connect lesson 3

		I can decide to which group an animal belongs, based on its key characteristics.	• This could be done in 2Question on Purple Mash which is a branching database.	
Lesson 3 How are invertebrates grouped?	2 hour	**WALT:** recognise characteristics of some of the main invertebrate groups **WILF:** I can make careful observations of invertebrates. I can describe the characteristics of insects, arachnids (spiders), crustaceans, myriapods, molluscs and worms.	**Working Scientifically:** Identifying differences, similarities or changes related to simple scientific ideas and processes. In this lesson children classify common land invertebrates into groups. By the end of this lesson they will know the characteristics of six groups of invertebrates and be able to assign animals to those groups. This lesson could be extended to include the observation or collection of invertebrates in or near the school grounds. Alternatively this could be carried out as a separate enrichment activity. • Review what a vertebrate is and discuss and identify the differences between vertebrate and invertebrate. • Share that 80% of the worlds population are invertebrates.	Collins connect lesson 4

		I can decide to which group an animal belongs, based on its key characteristics	 • Look at key groups; insects, annelids, protozoa, crustaceans, arachnids, molluscs, echinoderms. • Using padlet, children create an information back with facts about the 7 groups of invertebrates (ipads required) • E.g.	

				
Lesson 4 Who lives here?	2 hours	**WALT:** use yes/no questions to sort animals found in a water habitat. **WILF:** I can make careful observations of animals.	**Working Scientifically:** Making systematic and careful observations. They should choose the challenge based on previous experience of using keys. • Take the children on a bug hunt – but call it an invertebrate hunt. Identify who lives in the different settings around the school grounds. • Share with the children information on pollinators and talk about how we can promote good mini beasts in the locality of the school grounds. • Children to create a factfile using a publishing programme based on the minibeasts that they found.	Collins connect lesson 2 Bug pooters, Laptops, magnifying glasses.

		I can use my observations to identify animals. I can identify questions that can be used to sort animals using their distinguishing features.	• Children can classify the minibeasts using their own criteria. • Children could draw or use 2Question for this.	