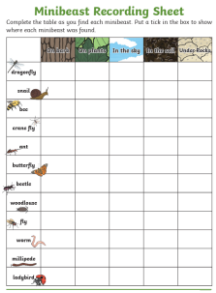
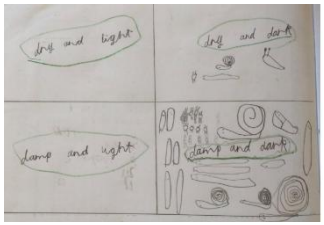
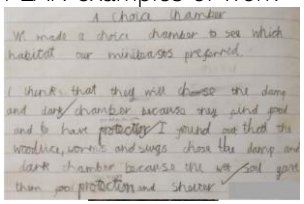
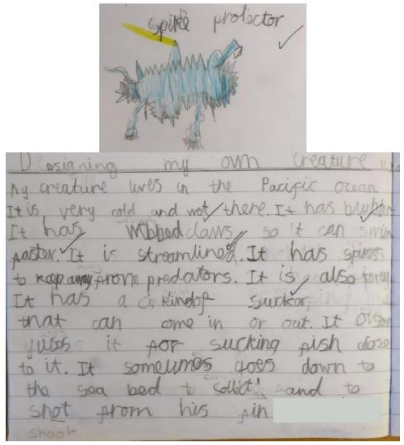
Hartford Primary School

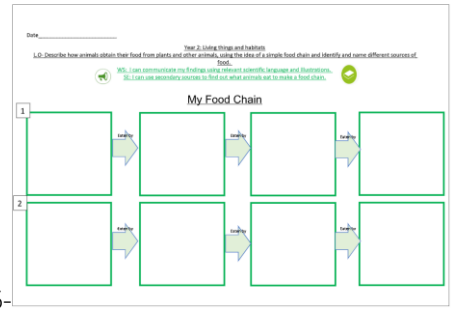
YEAR GROUP	Year 2	SUBJECT	Science	TERM	Autumn - Living Things and their Habitats (12 weeks)
National Curriculum Statements	• explore and compare the differences between things that are living, dead, and things that have never been alive • identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other • identify and name a variety of plants and animals in their habitats, including microhabitats • describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.				
Prior Learning (What should they already know)	• Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. (Y1 - Plants) • Identify and describe the basic structure of a variety of common flowering plants, including trees. (Y1 - Plants) • Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals. (Y1 - Animals including humans) • Identify and name a variety of common animals that are carnivores, herbivores and omnivores. (Y1 - Animals including humans) • Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets). (Y1 – Animals, including humans) • Observe changes across the four seasons. (Y1 - Seasonal changes)				
MISCONCEPTIONS	Some children may think: • an animal's habitat is like its 'home' • plants and seeds are not alive as they cannot be seen to move • fire is living • arrows in a food chain mean 'eats'. App				
RETRIEVAL VOCABULARY	carnivores, herbivores, omnivores, fish, amphibians, reptiles, birds, mammals, deciduous, evergreen,		NEW VOCABULARY	living, dead, never been alive, suited, suitable, basic needs, food, food chain, shelter, move, feed, names of habitats e.g. rainforest, savannah, tundra and desert, names of micro-habitats e.g. under logs, in bushes etc.	

	Essential Learning for this lesson	Suggested teaching tasks/approaches	New Knowledge – What I'm leaving the lesson with

LESSON 1	Recap prior learning I can explore living things and non living things in my school grounds habitat.	Recap previous vocabulary Concept Map on 'Living Things and their Habitats' Discuss new Vocabulary for Unit https://www.bbc.co.uk/bitesize/topics/zk7h34j/watch/zd472sg Explore school habitat. Go on a scavenger hunt to find living things and non living things can we find? Look for plants and animals. Children record in a list with headings living and non living. Introduce MRS NERG to begin to develop understanding to help classify into living/non-living. Plymouth Lesson 1 and recap slides OR Oak Academy Living or Non-Living	The world is made up of things that are living and not living (non-living). A living thing is something that is alive and needs food, water and air. A thing that is not living does not need food, water and air because it is not alive. Living and non-living things can be compared and grouped by looking at what is the same and what is different. Be introduced to MRS NERG to help to classify living things
LESSON 2	I can Identify and name a variety of plants and animals in a microhabitats. (covering now so that bees/butterflies are still around) WS: I can record my findings using a tally chart. SE: I can look for patterns in my data as to where different minibeasts live.	Children go into school grounds and explore micro habitats: flower beds, under a log, hedges. Record animals found in different micro habitats using a tally chart.  Minibeast habitat recording investigation on Twinkl	A habitat is where a group of plants and animals live. A habitat provides the things that an animal or plant needs to survive. A microhabitat is a smaller area where a plant or animal lives. Examples of microhabitats can be rock pools or a log. Smaller plants and animals can be found living in microhabitats.
LESSON 3	I can explore the differences between things that are living, dead and things that have never been alive. WS: I can ask questions about where the object came from. SE- I can identify and classify objects that are	Revise living/ non-living. Explain that non-living can be split into 'dead' and 'never been alive'. Children begin to classify animals/plants/objects into living/ dead/never been alive. Revisit Mrs Nerg to help to distinguish. Children go out into the school grounds with ipads. Take photos of two items that are alive, two that are dead and two that have never been alive. Come back into school and record the things they have found in a table with headings dead, alive, never been alive. Add extra things that they can think of. Parts of Plymouth Lesson 1 useful for this lesson See PLAN examples of work Yr 2	A living thing is something that is currently alive and needs food, air and water to stay alive. Something that is dead was once living but is no longer alive. A non-living thing is something that has never been alive. Things can be compared and grouped into alive, dead and never alive.

	alive, dead and never been alive.		
LESSON 4	I can explore the differences between things that are living, dead and things that have never been alive. WS I can identify and classify objects that are alive, dead and never been alive.	Odd one out activities -Plymouth lesson 1 Children complete sorting activity- Plymouth lesson 1. Sort pictures into table with headings: dead, alive, never been alive. (NB – don't sort into Venn Diagram as error with middle section on Plymouth slide) Add explanations for one picture in each column. Eg A doll has never been alive because…… Plymouth Lesson 1again very useful for this lesson.	A living thing is something that is currently alive and needs food, air and water to stay alive. Something that is dead was once living but is no longer alive. A non-living thing is something that has never been alive. Things can be compared and grouped into alive, dead and never alive.
LESSON 5	I can Identify and name a variety of plants and animals in their habitat, including microhabitats. WS: I can make predictions and observe closely SE: I can look for patterns to see which conditions woodlice prefer	Woodlice experiment- Children set up 4 compartments for a choice chamber for woodlice. Predict where they think the wood lice will go. Collect woodlice and observe where they go through the afternoon. Draw conclusions to answer enquiry question.  PLAN examples of work 	Woodlice prefer damp, dark conditions. By looking for patterns we can find answers to our questions.
LESSON 6- ADDITIONAL LESSON FOR PLANTS UNIT	I know a plant can grow from a bulb. WS I can observe a bulb closely using a magnifying glass and record my observations in a detailed drawing.	Children to observe tulip and daffodil bulbs closely using a magnifying glass. Record observations through drawing. Plant bulbs in September/ October and observe growth in the Spring. Also can plant an Amaryllis Bulb and observe the growth.	Plants can grow from a bulb. Daffodil and Tulip bulbs are planted in the Autumn.
LESSON 7	I can identify animals and classify which habitat (desert, tundra or rainforest) they live in.	Watch bitesize clip on different habitats (biomes) https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zvsp92p#zmvsf82	A habitat is where a group of plants and animals live. A habitat provides the things that an animal or plant needs to survive.

	WS: I can record my observations using labelled drawings S.E -I can classify animals into different habitats.	Children match animals to habitats Rainforest, desert and tundra. (mix up desert, tundra and rainforest cards in Plymouth Lesson 2). Cut out pictures and group according to correct habitat. Record in a prepared table. Add extra animals if they know any to each column. Plymouth Lesson 2- use cards	Rainforests, Deserts and Tundra are examples of habitats. I can identify a selection of animals that live in a rainforests, deserts and tundras,
LESSON 8	I can identify and explain how an animal is suited to it's habitat. WS: I can record my observations using labelled drawings	Animal adaption Pick animals from any of the habitats from lesson 2 (desert, tundra or rainforest) . Label, describe and explain how it is suited to it's habitat Plymouth Lesson 2 This can be covered over two lessons if needed looking at two different habitats.	Animals that live in a desert, a rainforest or tundra have features that enable them to survive in their habitat.
LESSON 9	I can identify and animal and explain how an animal is suited to it's habitat. WS: I can record my observations using labelled drawings	Animal Adaption Pick an animal picture from a savannah habitat cards on Plymouth and explain how it is suited to it's habitat. (NB – don't cover temperate woodland and grassland as too similar to savannah) . Plymouth Lesson 3 or https://www.twinkl.co.uk/resource/ks1-african-savanna-information-powerpoint-t-tp-1629733641 Home work Idea- make a habitat of your choice in a show box.	Animals that live in a savannah have features that help them to survive in that habitat.
LESSON 10	I can create an imaginary animal and explain how the animal is suited to it's habitat. WS: I can record my observations using labelled drawings	Create own animal that can live in a habitat of their choosing. Explain how that animal is suited to it's habitat to enable it to survive. See PLAN examples of work 	To use knowledge to explain how an imaginary animal is suited to a habitat.

LESSON 11	Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identify and name different sources of food. WS: I can communicate my findings using relevant scientific language and illustrations.	https://www.bbc.co.uk/teach/class-clips-video/articles/zbr8d6f Create food chains with laminated 'animal cards' activity on Plymouth lesson 6. Children choose ¾ pictures and order in a food chain sequence. Draw pictures of the plants/animals and create paper chains to represent food chains, eg grass – mouse – owl https://www.youtube.com/watch?v=VAqfp1b_Wsk Children to explain why they have placed each plant /animal in that particular order.	Animals need food from plants and other animals to stay alive. A food chain is used to show the order in which living things depend on each other for food. A food chain begins with a plant.
LESSON 12	Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identify and name different sources of food. WS: I can communicate my findings using relevant scientific language and illustrations. EXIT QUIZ linked to assessment questions	Food chains continued- consolidate learning by drawing/ cutting outplants/animals to create own food chains. Children need to understand importance of the direction of the arrow . Do not need to use the terms 'producer' and 'consumer'. Plymouth Lesson 6- 	Animals need food from plants and other animals to stay alive. A food chain is used to show the order in which living things depend on each other for food. A food chain begins with a plant. The correct direction of the 'arrows' in a food chain.

Helpful resources to reference	Plymouth Scheme BBC Bitesize Oak Academy- Science
Assessment Questions for Unit	What is a habitat and can you name some different habitats? What is a microhabitat and can you name some in our school grounds? Which are living, dead or were never alive? What is a food chain?