Science Year 2
Core Purpose Long Term Overview

	Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge content	**Unit**	Living things and their habitats	Living things and their habitats	Animals, including humans	Plants	Animals, including humans	Uses of everyday materials
	National Curriculum statements	• explore and compare the differences between things that are living, dead, and things that have never been alive • find out about and describe the basic needs of animals, including humans, for survival (water, food and air) • identify and name a variety of plants and animals in their habitats, including microhabitats • 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 • 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 •		• notice that animals, including humans, have offspring which grow into adults	• observe and describe how seeds and bulbs grow into mature plants • find out and describe how plants need water, light and a suitable temperature to grow and stay healthy	• describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene	• identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses • find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching
	Rationale for order	**Having not seen each other over summer, children will notice that their classmate are taller and look slightly different. This can form the basis for discussion of growing up. Basic survival needs of humans feeds into next topic.**	**The discussion around what humans need to survive will allow children a foundation to build on when thinking about how other lifeforms survive in their habitats. Children can use this knowledge to identify animals in their habitats.**	**Conceptualising food chains will be easiest once children understand the basic requirements for survival and the types of animals that exist in different habitats. Identification of different plants in their habitats (children should be able to observe early flowering plants, evergreens, deciduous trees etc. in their local environment). Ideal time to recap on previous learning in preparation for plants topic.**	**Spring is the ideal time to observe plants growing. Previous learning on food chains will mean children know that plants require sunlight and should get them thinking about what else plants require.**	Previous work on what allows a plant to stay healthy can underpin the discussion on how humans stay healthy. In addition, the weather should be allow for an investigation into the benefits of exercise to be held outside.	
	Key Knowledge (to be retained in bold)						
SC1 Investigation focus	**SC1 Focus**	***How can you best look after a creature?*** - **Fully guided: Plan, conduct, record, conclude & explain** Discuss the best habitat for a creature and the best diet. Link to basic survival needs. Using a mini beast (snail, woodlouse etc found from nature walk) test which habitat they prefer and which diet.					
	Working Scientifically focus covered from progression overview: **(Focus which will be primarily child led/independent. There is a focus on developing SC1 skills, which**	**THIS UNIT WILL BE FULLY GUIDED AND MODELLED BY THE TEACHER** **This should build on the plan do review model used in EYFS** **PLAN** -That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions. **CONDUCT** -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties *(Classification)*	**PLAN** -That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions. **CONDUCT** -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their	**PLAN** -That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions. **CONDUCT** -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties *(Classification)* **RECORD** - That in order to answer the asked	**PLAN** -That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions. **CONDUCT** -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on	**PLAN** -That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions. **CONDUCT** -That they can use magnifying glasses to	**PLAN** -That scientific investigation begins with a question they want to find the answer to -That they can ask questions about the world and then make observations to answer these questions. **CONDUCT** -That they can use magnifying glasses to observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties *(Classification)*

	should be first modelled and allow a chance for the children to develop indep)	**RECORD** - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find **CONCLUDE AND EXPLAIN** -To suggest an answer based on real life experience or using taught scientific knowledge	observable properties *(Classification)* **RECORD** - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find **CONCLUDE AND EXPLAIN** -To suggest an answer based on real life experience or using taught scientific knowledge	questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find **CONCLUDE AND EXPLAIN** -To suggest an answer based on real life experience or using taught scientific knowledge	their observable properties *(Classification)* **RECORD** - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find **CONCLUDE AND EXPLAIN** -To suggest an answer based on real life experience or using taught scientific knowledge	observe objects closely (as a way of collecting results) -That objects can be identified or sorted into groups based on their observable properties *(Classification)* **RECORD** - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find **CONCLUDE AND EXPLAIN** -To suggest an answer based on real life experience or using taught scientific knowledge	**RECORD** - That in order to answer the asked questions, data needs to be gathered and recorded -That they can write down numbers and words or draw pictures to record what they find **CONCLUDE AND EXPLAIN** -To suggest an answer based on real life experience or using taught scientific knowledge
Assessment focus	**Teacher Assessment Framework Knowledge**	**Describe the basic needs of animals for survival** **Identify whether things are alive, dead or have never lived**	**Describe how animals get their food from other animals and/or from plants, and use simple food chains to describe these relationships**	**Describe the main changes as young animals, including humans, grow into adults**	**Describe the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants**	**Describe the importance of exercise, a balanced diet and hygiene for humans**	**Identify and compare the suitability of a variety of everyday materials for different uses**