

Term	Autumn	Spring One	Spring Two	Summer 1	Summer 2
Knowledge	Animals including humans	Living things and their habitats	Living things and their habitats	Uses of everyday materials	Plants
Scientific enquiry	Researching	Pattern seeking Researching classifying	Pattern seeking Researching	Classifying Fair testing	Observing over time
Working scientifically skills	To ask scientific questions To plan an enquiry To make a prediction	To observe closely To measure accurately To gather/ record results	To ask scientific questions To plan an enquiry To make a prediction	To ask scientific questions To plan an enquiry To make a prediction To gather/ record results	To observe closely To measure accurately To gather/ record results
Building science capital	Athletes Sports health Animals	Climate change Environmental rights /issues Conservation	Climate change Environmental rights /issues Conservation	Builders and buildings Making product/product design	Use of sensory garden and school grounds (Edible gardens project)
Composite knowledge	What do animals including humans need in order to survive and stay healthy?	What are the differences between living things, things that are dead and things that have never been alive? Where do different animals live and why?	Where do different animals live and why? How and where do animals find their food?	Which materials are most suitable for different purposes and why? How can objects change shape? How can shape changes make a material suitable for a purpose?	What is the difference between a seed and a bulb? How do plants grow? How do seeds develop into a mature plant? What do they need to thrive?
Component knowledge	Notice that animals, including humans, have offspring which grow into adults Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	Explore and compare the differences between things that are living, dead, and things that have never been alive 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 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,	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.

			identify and name different sources of food.	bending, twisting and stretching.	
Vocabulary	Survival, Water, Air, Food, Adult, Baby, Offspring, Calf, Exercise, Hygiene, gestation SRE vocabulary (Different, similar, male, female, udders, teats, arms, feet, vulva, hand, penis, eyes, nipple, nose, testicles, ear, knees)	Living, Dead, Habitat, Energy, Food chain, Predator, Prey, Woodland, Pond, Desert	Living, Dead, Habitat, Energy, Food chain, Predator, Prey, Woodland, Pond, Desert, climate , adaptation	Hard, Soft, Stretchy, Stiff, Shiny, Dull, Rough, Smooth, Bendy, Waterproof, Absorbent, Opaque, Transparent Brick, Paper, Fabrics, Squashing, Bending, Twisting, Stretching Elastic, Foil	Seeds, Bulbs, Water, Light, suitable Temperature, Growth , mature plants , seedlings, shoots, young plant, mature plant , germination
Links to prior knowledge	EYFS Shows care and concern for living things and the environment Year 1 Animals including Humans	EYFS Shows care and concern for living things and the environment	EYFS Shows care and concern for living things and the environment	EYFS - Beginning to be interested in and describe the texture of things. Manipulates materials to achieve a planned effect Year 1 Everyday materials	EYFS -Developing an understanding of growth, decay and changes over time Looks closely at similarities, Shows care and concern for living things and the environment differences, patterns and change. Year 1 Plants
Key knowledge for assessment	To identify what humans need for survival. To explain the life cycles of a living thing. To explain the effect of human actions on our body (exercise/healthy eating) To know what a human baby can do at birth	To explain the difference between living, dead never alive. To explain why animals chose specific locations to live. To identify a variety of habit types.	To explain why animals chose specific locations to live e.g. habitat climate and animal's body adaptations. To identify a variety of habitat types. To describe a food chain and explain the links between animals.	To describe properties of materials. To identify the most suitable materials for a purpose based on their properties and explain my choices.	To identify what plants need in order to grow and survive. To explain the effect of the environment on plant growth.
Cross-curricular links	D&T - healthy eating/ preparing fruit and vegetables Giant's causeway – big baby	-Habitats across different continents (London to Tokyo landscape similarities and differences)	Geography-Habitats across different continents. (London to Tokyo landscape similarities and differences	London-waterproof materials Paddington's raincoat. London-Katie in London Absorbency Lion's blanket	Plants used for medicine -Florence Nightingale and European medicine Mary Seacole and herbal remedies

Half Termly Planning

Autumn 1	Lesson Objective	Main Task	Resources	Vocabulary
Lesson 1	To retrieve knowledge from Year 1	Discuss learning from all topics in previous years with on-screen prompts.	IWB	
Lesson 2	To identify animals and their offspring	Sort animals and their offspring into categories 'adult' and 'offspring'. Chn to spot links between which animals look like their offspring and which don't.	Widget Key words Ruler	Adult, Baby, Offspring, Calf
Lesson 3	To find out how animals change as they grow into adults.	Chn learn about different life cycles and verbally compare them.	Non-fiction life cycle info sheets	Adult, Baby, Offspring
Lesson 4	To describe the basic needs of humans for survival.	Chn learn about basic needs for survival and write sentences explaining them.	Scaffold images Scaffold sentences	Survival, Water, Air, Food
Lesson 5	To understand the importance of healthy living.	Chn learn about how to stay healthy and identify how they stay healthy and how they can be even healthier.	IWB - video Scaffold sentences	Exercise, Hygiene

Autumn 2	Lesson Objective	Main Task	Resources	Vocabulary
Lesson 1	Inset day			
Lesson 2	To understand the importance of a balanced diet (discussion).	Chn learn what a balanced diet consists of and discuss their diets.	IWB - video Scaffold sentences	Balanced, healthy, diet, carbohydrates, protein
Lesson 3	To understand the importance of a balanced diet (design a lunch box).	Chn recap what a balanced diet consists of and design a lunch box with the essentials needed for a balanced diet.	IWB - video Scaffold sentences Lunch box sheet	Balanced, healthy, diet, carbohydrates, protein
Lesson 4	To retrieve knowledge	Retrieval questions based on topic so far.		
Lesson 5	To know the importance of hygiene for humans	Answering questions about Hygiene	Visual sentences T4W Key words Widget	Hygiene Germs
Lesson 6	To know the importance of hygiene for humans	Chn to make up a song teaching their audience why it is important to have good hygiene and how they can do so.	Key words	Hygiene Germs Bacteria
Lesson 7	To answer assessment questions	Chn to answer assessment questions in their books	Books Scaffolds	
Lesson 8				

Spring 1	Lesson Objective	Main Task	Resources	Vocabulary
Lesson 1	To retrieve knowledge	Quiz	IWB, individual whiteboards	
Lesson 2	To explore things that are dead, alive and never been alive	Exploring outdoors looking for objects that are dead, alive or never been alive.	Clipboards, table sheet for recording results, widget key words, picture strip for recording in books	Dead Alive Never been alive
Lesson 3	To begin to compare things that are dead, alive and never been alive.	Thinking about objects found last week that are dead, alive or never been alive. Writing down how they know an object is dead, alive or never been alive.	Books, widget key words, scaffolds	Dead Alive Never been alive
Lesson 4	To identify the features of a polar habitat	Discuss and identify	Books, scaffolds, pictures to stick in	polar habitat
Lesson 5	To identify the features of a desert habitat	Discuss and identify	Books, scaffolds, pictures to stick in	desert habitat
Lesson 6				
Lesson 7				
Lesson 8				

Spring 2	Lesson Objective	Main Task	Resources	Vocabulary
Lesson 1	To identify the features of an ocean habitat	Discuss and identify	Books, scaffolds, pictures to stick in	ocean habitat
Lesson 2	To identify the features of a woodland habitat	Discuss and identify	Books, scaffolds, pictures to stick in	woodland habitat
Lesson 3	To identify the features of microhabitats	Discuss and identify	Books, scaffolds, pictures to stick in	microhabitats
Lesson 4	Assessment	Answer assessment questions	Books, scaffolds	
Lesson 5				
Lesson 6				
Lesson 7				
Lesson 8				

Summer 1	Lesson Objective	Main Task	Resources	Vocabulary
Lesson 1	To retrieve knowledge	Quiz	IWB, individual whiteboards	
Lesson 2	To identify uses of different everyday materials	Practical	Materials, scaffold	
Lesson 3	To identify uses of different everyday materials	Sorting everyday materials into a table	Materials, books, sheet to stick in, scaffold	
Lesson 4				
Lesson 5				
Lesson 6				
Lesson 7				
Lesson 8	LO: Investigate which papers are most absorbent.	Test absorbency using pipette experiment	Pipette Different types of paper Widgit Results table	Materials Prediction Absorb Observe

Summer 2	Lesson Objective	Main Task	Resources	Vocabulary
Lesson 1	LO: To use hydroponics to understand how a seed grows.	Practical lesson to put/sow seeds in a plastic bag with the correct tools to support growth.	Plastic bag Seeds Water Tissue	Sow Seed Germinate grow
Lesson 2				
Lesson 3				
Lesson 4				
Lesson 5				
Lesson 6				
Lesson 7				
Lesson 8				

