



	Working Scientifically		
	Questioning	Practical skills, observation, planning	Recording, summarising and evaluating.
Year 2	Asking simple questions and recognising that they can be answered in different ways.	Performing simple tests Observing closely, using simple equipment	Identifying and classifying. Using their observations and ideas to suggest answers to questions. Gathering and recording data to help in answering questions.

Year 2 – Everyday materials	
Recall	Seasonal Change- Year 1 Observe changes across the four seasons Observe and describe weather associated with the seasons and how day length varies Vocabulary: Spring, Summer, Autumn, Winter, weather, day length, temperature
End Point Disciplinary Knowledge (National Curriculum Statements)	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
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> Identify a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard

	<ul style="list-style-type: none"> • Distinguish between objects and the materials that they are made of • Identify the suitability of materials for everyday objects • Investigate the properties of everyday materials
Coverage within school:	<ul style="list-style-type: none"> • Year 1 • Year 2 • Year 4 • Year 5
Key Vocabulary	Squashing, bending, twisting, stretching, material, use, solid, change, shape, reduce, reuse, recycle, properties, identify, groups
Teacher Assessment	
Possible Misconceptions	Children may think of the word 'material' meaning fabric. Children need to know that material refers to the matter from which something is made. Children may also have misconceptions about different materials. They may think that if something is hard then it must be strong or if something is soft then it must be fragile. Glass is hard but very fragile whilst fabric is soft but can be strong.
Class Teacher notes (to inform next year, not to be published online)	

Year 2 – Living things and their habitats	
Recall	<p>Materials and states of matter- Year 1</p> <p>Distinguish between an object and the material from which it is made.</p> <p>Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p> <p>Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties</p>

	Vocabulary: wood, plastic, glass, metal, water, rock, rough, smooth, opaque, waterproof, transparent, bendy, stretchy, dull
End Point Disciplinary Knowledge (National Curriculum Statements)	<p>Explore and compare the differences between things that are living, dead, and things that have never been alive.</p> <p>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</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats</p> <p>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.</p>
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> • Explore and compare the difference 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 a habitat which they are suited • Construct a simple food chain • Observe closely and use observations
Coverage within school:	<ul style="list-style-type: none"> • Year 2 • Year 4 • Year 5 • Year 6
Key Vocabulary	Living, dead, never been alive, habitat, microhabitat, food chain, predator, prey, producer
Teacher Assessment	
Possible Misconceptions	<p>Children may not fully understand that some of the food we eat used to be living animals that are now dead.</p> <p>Children may have misconceptions about where animals live as they may have only seen some of these animals in the zoo so might not realise where their habitat would be in the wild.</p>
Class Teacher notes (to inform next year, not to be published online)	

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Year 2 – Plants	
Recall	<p>Animals including humans- Year 1</p> <p>Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)</p> <p>Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.</p> <p>Vocabulary- fish, amphibians, reptiles, birds, mammals, senses (taste, touch, sight, smell, hearing), carnivore, omnivore, herbivore.</p>
End Point Disciplinary Knowledge (National Curriculum Statements)	<p>Observe and describe how seeds and bulbs grow into mature plants.</p> <p>Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.</p>
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> • Observe how seeds and bulbs grow into mature plants- opportunity to plant • Identify that fruit, vegetables and herbs are types of plants that we eat • Identify the parts of a plant • Understand what plants need to grow and stay healthy • Understand the life cycle of a plant • Explore the life and work of George Washington Carver
Coverage within school:	<ul style="list-style-type: none"> • Year 1 • Year 2

	<ul style="list-style-type: none"> Year 3
Key Vocabulary	Seeds, bulbs, water, light, temperature, growth
Teacher Assessment	
Possible Misconceptions	<p>Children may not realise that plants are living things and that they can die. They may think only things with faces and brains are alive.</p> <p>Children may not know that plants have roots in the ground that help the plant.</p> <p>Children may think that all seeds look the same, so we need to make sure that we allow them to explore and observe a variety of seeds and bulbs.</p>
Class Teacher notes (to inform next year, not to be published online)	

Year 2 – Animals including humans	
Recall	<p>Plants- Year 1</p> <p>Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</p> <p>Identify and describe the basic structure of a variety of common flowering plants, including trees.</p> <p>Children will be given the opportunity to grow their own plants and watch them grow. Children will be able to compare how plants grow in different scenarios.</p> <p>Vocabulary- deciduous, evergreen, flower, stem, leaves, roots.</p>
End Point Disciplinary Knowledge	<p>Compare how animals from different classifications, including humans, have offspring which grow into adults</p> <p>Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</p>

(National Curriculum Statements)	Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> • Find out about the basic needs of humans • Notice that humans have offspring that grow into adults • Understand that animals change and grow into adults • Describe the importance for humans to exercise • Describe the importance for humans to eat the right amounts of different types of food • Describe the importance of humans to have good hygiene
Coverage within school:	<ul style="list-style-type: none"> • Year 1 • Year 2 • Year 3 • Year 4 • Year 5 • Year 6
Key Vocabulary	Fish, amphibians, reptiles, birds, mammals, offspring, hygiene, exercise, water, food, air.
Teacher Assessment	
Possible Misconceptions	<p>Children might need a thorough explanation of the difference between a “need” and a “want” – needs are things that humans cannot survive without.</p> <p>Children may have heard the word diet in a negative way when someone is trying to lose weight. Children need to be told that diet just means the food that someone eats.</p> <p>Children may not understand that medicine must only be taken when you are ill and a trusted adult has given it to you.</p> <p>Certain medicines might taste nice but you cannot digest them if you are not ill.</p>
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