



	Working Scientifically		
	Questioning	Practical skills, observation, planning	Recording, summarising and evaluating.
Year 1	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 1 – Plants	
Recall	Living things and their habitats: The weather Seasonal change
End Point Disciplinary Knowledge (National Curriculum Statements)	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees. 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.
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> Plant seeds using simple equipment. Observing closely how seeds grow in different environments. Identify the parts of a plant. Describing the basic structure. Identify a variety of common and garden plants. Begin to introduce deciduous and evergreen trees.

	<ul style="list-style-type: none"> • How do plants grow? Observe the changes between the plants that were previously planted. (Ideally would be earlier in the sequence but the plants need time to grow) • Identify how some plants provide us with fruits and vegetables. Name and sort common fruits and vegetables. • Identify and name a variety trees using the terms deciduous and evergreen. Observing leaves closely.
Coverage within school:	<ul style="list-style-type: none"> • Year 1 • Year 2 • Year 3
Key Vocabulary	Deciduous, evergreen, flower, stem, leaves, roots, water, petals.
Teacher Assessment	
Possible Misconceptions	<p>Children may not realise that plants are living things and that they can die. They may only think 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>
Class Teacher notes (to inform next year, not to be published online)	
Year 1 – Animals including humans	
Recall	<p>Electricity:</p> <p>Electrical items</p> <p>How to safely use electrical items</p> <p>Plants</p> <p>The names of plants, flowers and food produce.</p> <p>The names of the parts of a plant such as flower, stem, leaf and root.</p>

<p>End Point Disciplinary Knowledge</p> <p>(National Curriculum Statements)</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>
Sequence of Learning / Contextual Knowledge	<p><u>Half term 1</u></p> <ul style="list-style-type: none"> • Observing animals. Identifying and comparing animals structures e.g. beak, wings, four legs, etc. • Identify, name and sort animals into herbivores, carnivores and omnivores. • Sorting animals by their classification (fish, amphibians, reptiles, birds and mammals) • Explore the life and work of David Attenborough <p><u>Half term 2</u></p> <ul style="list-style-type: none"> • Label and recognise the parts of the human body • To recognise which part of the body is associated with each sense • Investigating taste e.g. bitter, sweet, sour, salty
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, senses (taste, touch, sight, smell, hearing), carnivore, omnivore, herbivore.
Teacher Assessment	
Possible Misconceptions	Children might think that all animals eat the same thing. They may not realise that animals eat different things. There may also be misconceptions about animals eating humans e.g. sharks eat humans. This needs to be discussed that no animals hunt humans and that we do not live in the same habitat.

	Children may discuss how all humans have two arms/two legs/eyes to see/ears to hear. Teachers may want to discuss how some children have disabilities so do not have all the same body parts or cannot use all of their senses to show diversity and inclusivity.
Class Teacher notes (to inform next year, not to be published online)	

Year 1 – Everyday materials	
Recall	Animals including humans: How they have grown and changed The names of simple body parts Senses Life cycle of a chicken, frog and butterfly. Animal names and their habitats.
End Point Disciplinary Knowledge (National Curriculum Statements)	Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. 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
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> Identify a variety of everyday materials including wood, plastic, glass, metal, water and rock. Describe properties of a variety of everyday materials Distinguish between an object and the material which it is made Investigate properties of different materials Investigate different materials/fabrics
Coverage within school:	<ul style="list-style-type: none"> Year 1 Year 2 Year 4

	<ul style="list-style-type: none"> Year 5
Key Vocabulary	Wood, plastic, glass, metal, water, rock, rough, smooth, opaque, waterproof, transparent, bendy, stretchy, dull
Teacher Assessment	
Possible Misconceptions	<p>Children may think of the word 'material' meaning fabric. Children need to know that material refers to the matter from which something is made.</p> <p>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.</p>
Class Teacher notes (to inform next year, not to be published online)	

Year 1 – Seasonal change	
Recall	<p>Light:</p> <p>Light and dark</p> <p>Natural and man made objects that create light</p> <p>Nocturnal animals</p>
End Point Disciplinary Knowledge (National Curriculum Statements)	<p>Observe changes across the four seasons</p> <p>Observe and describe weather associated with the seasons and how day length varies</p>
Sequence of Learning / Contextual Knowledge	<ul style="list-style-type: none"> Observe changes across the four seasons- describing how things change between seasons Describe what happens in spring (opportunity for spring walk) Describe what happens in summer and how to stay safe in the sun Observe and describe the weather

	<ul style="list-style-type: none"> Describe the weather and how day length varies
Coverage within school:	<ul style="list-style-type: none"> Year 1
Key Vocabulary	Vocabulary: Spring, Summer, Autumn, Winter, weather, day length, temperature
Teacher Assessment	
Possible Misconceptions	Children may not realise that seasons are different across the world. Children will need to understand that the weather associated with the season may not always happen (e.g. it may not always be sunny in summer).
Class Teacher notes (to inform next year, not to be published online)	