










Year 1 Science progression document

Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<u>Animals including humans</u>	<u>Animals including humans</u>	<u>Plants</u>	<u>Plants</u>	<u>Everyday Materials</u>	<u>Everyday Materials</u>
	<p>A1: I can 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>A2: I can identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals.</p>	<p>A3: I can identify and name a variety of common animals that are carnivores, herbivores and omnivores</p> <p>A4: I can describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets).</p>	<p>P1: I can identify and name a variety of common wild and garden plants, including deciduous and evergreen.</p>	<p>P2: I can identify and describe the basic structure of a variety of common flowering plants, including trees.</p>	<p>M1: I can distinguish between an object and the material from which it is made</p> <p>M2: I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.</p>	<p>M3: I can describe the simple physical properties of a variety of everyday materials.</p> <p>M4: I can compare and group together a variety of everyday materials on the basis of their simple</p>
	<u>Seasonal Change:</u>	<u>Seasonal Change:</u>	<u>Seasonal Change:</u>	<u>Seasonal Change:</u>	<u>Seasonal Change:</u>	<u>Seasonal Change:</u>

	<p>S1: Observe changes across the four seasons.</p> <p>S2: Observe and describe the weather associated with the seasons and how the day length varies.</p>	<p>S1: Observe changes across the four seasons.</p> <p>S2: Observe and describe the weather associated with the seasons and how the day length varies.</p>	<p>S1: Observe changes across the four seasons.</p> <p>S2: Observe and describe the weather associated with the seasons and how the day length varies.</p>	<p>S1: Observe changes across the four seasons.</p> <p>S2: Observe and describe the weather associated with the seasons and how the day length varies.</p>	<p>S1: Observe changes across the four seasons.</p> <p>S2: Observe and describe the weather associated with the seasons and how the day length varies.</p>	<p>S1: Observe changes across the four seasons.</p> <p>S2: Observe and describe the weather associated with the seasons and how the day length varies.</p>
	<p><u>Scientists to study:</u> <i>Aristotle</i> – It was Aristotle who said that humans have 5 senses.</p>		<p><u>Scientists to study:</u> <i>Maria Sibylla Merian</i> (German artist, scientific illustrator and naturalist)</p>		<p><u>Scientists to study:</u> <i>Charles Macintosh</i></p>	
<p><u>Working scientifically skills</u> (Seasons) Observing Setting up tests and recording data. Observing, measuring and recording data.</p>	<p><u>Working scientifically skills</u> Asking questions and making observations. Making observations and recording data. Setting up simple tests and recording data. Making observations and communicating information.</p>	<p><u>Working scientifically skills</u> Asking questions and making observations. Making observations and recording data. Setting up simple tests and recording data. Making observations and communicating information.</p>	<p><u>Working scientifically skills:</u> Making observations and recording information. Making predictions and observations. Naming and observing. Asking questions.</p>	<p><u>Working scientifically skills:</u> Making observations and recording information. Making predictions and observations. Naming and observing. Asking questions.</p>	<p><u>Working scientifically skills:</u> Asking questions and recording data. Observing and asking questions. Making observations and grouping. Setting up a test and communicating results.</p>	<p><u>Working scientifically skills:</u> Asking questions and recording data. Observing and asking questions. Making observations and grouping. Setting up a test and communicating results.</p>

Subject Specific Vocabulary						
Seasonal change vocabulary: Seasons Summer Spring Autumn Winter Weather Sun Day Moon Night Light Dark Rain Wind Snow Frost Sleet Fog Cloudy	Head Ear Eye Mouth Nose Leg Knee Arm Elbow Neck Face Teeth Hair Senses Fish Reptile Mammal Bird Amphibian Wings Beak	Fish Reptile Mammal Bird Amphibian Wings Beak Carnivore Herbivore Omnivore	Common plants Wild plants Deciduous Evergreen Environment Growth Leaves Flowers (blossom) Petals Fruit Roots Bulb Seed Trunk Stem Branches	Flowering plants Environment Growth Leaves Flowers (blossom) Petals Fruit Roots Bulb Seed Trunk Stem Branches	Object Material Wood Plastic Glass Paper Fabric Metal Rock Brick Elastic	Object Material Compare Hard/soft Stretchy/stiff Shiny/dull Rough/smooth Bendy/not bendy (flexible) Waterproof/not waterproof Absorbent/not absorbent Opaque/transparent Translucent

Term:	Unit:	Key end points:	Prior learning:	Future learning:	Common misconceptions:
Autumn	<p>Animals including humans</p> <div> <p>Identifying, grouping and classifying Making observations to name, sort and organise items.</p>  </div> <div> <p>Pattern-seeking Identifying patterns and looking for relationships in enquiries where variables are difficult to control.</p>  </div> <div> <p>Research Using secondary sources of information to answer scientific questions.</p>  </div>	<p>By the end of this unit children will be able to:</p> <p>Talk about and describe their body.</p> <p>Talk about how they are the same and different from others e.g. physical appearance, things we like, things we do, things we believe etc.</p> <p>Talk about their senses and how we use them in everyday life.</p> <p>Talk about how they've changed throughout their time in year one.</p> <p>Talk about and describe different animals including what they eat and where they live.</p>	<p>To use their senses in hands-on exploration of natural materials. (EYFS)</p> <p>To begin to make sense of their own life story and family history. (EYFS)</p> <p>To understand the key features of a life cycle of a plant and animal. (EYFS)</p> <p>To begin to understand the need to respect and care for the natural environment and all living things. (EYFS)</p>	<p>To describe how animals obtain their food from plants and other animals, using the idea of a simple food chain and identify and name sources for food. (Y2- Living things and their habitats)</p> <p>Describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences including micro-organisms, plants and animals. (Y6 – Living things and their habitats)</p> <p>Give reasons for classifying plants and animals based on their specific characteristics. (Y6 – Living things and their habitats)</p>	<p>Some children may think:</p> <p>Only four legged mammals, such as pets, are animals. Humans are not animals.</p> <p>Insects are not animals.</p> <p>All 'bugs' or 'creepy crawlies' such as spiders are part of the insect group.</p> <p>Amphibians and reptiles are the same.</p>

Spring	<p>Plants</p> <div> <div> Observation over time Observing changes that occur over a period of time ranging from minutes to months.  </div> <div> Research Using secondary sources of information to answer scientific questions.  </div> <div> Comparative / fair testing Changing one variable to see its effect on another, whilst keeping all others the same.  </div> <div> Identifying, grouping and classifying Making observations to name, sort and organise items.  </div> </div>	<p>By the end of this unit children will be able to:</p> <p>Talk about and notice plants throughout the year.</p> <p>Talk about and describe different plants.</p> <p>Talk about what plants we eat.</p> <p>Talk about how to grow plants.</p> <p>Compare plants.</p> <p>Talk about how they can look after plants.</p>	<p>Plant seeds and care for growing plants. (EYFS)</p> <p>To begin to understand the need to respect and care for the natural environment and all living things. (EYFS)</p>	<p>To observe and describe how seeds and bulbs grow into mature plants. (Y2 – Plants)</p> <p>Find out how plants need water, light and a suitable temperature to grow and stay healthy. (Y2 – Plants)</p> <p>Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 – Living things and their habitats)</p> <p>Identify and describe the functions of different parts of flowering plants. (Y3 – Plants)</p> <p>Investigate the way water is transported within plants. (Y3 – Plants)</p>	<p>Some children may think:</p> <p>Plants are flowering plants that grow in pots with coloured petals, leaves and a stem.</p> <p>Trees are not plants.</p> <p>All leaves are green.</p> <p>A trunk is not a stem.</p> <p>Blossom is not a flower.</p>
Summer	<p>Everyday materials</p>	<p>By the end of this unit children will be able to:</p> <p>Talk about and notice objects throughout the year.</p>	<p>Explore collections of materials with similar and/or different properties. (EYFS)</p>	<p>Identify and compare the suitability of a variety of everyday materials including</p>	<p>Some children may think:</p> <p>Only fabrics are materials.</p>

	<p>Comparative / fair testing Changing one variable to see its effect on another, whilst keeping all others the same.</p> <p>Identifying, grouping and classifying Making observations to name, sort and organise items.</p>	<p>Talk about and describe different objects/materials.</p> <p>Talk about and describe objects we use every day.</p> <p>Talk about how everyday objects are made (in a simple way)</p> <p>Compare objects.</p> <p>Talk about how we look after objects/or belongings.</p>	<p>Talk about the differences between materials and changes they notice. (EYFS)</p> <p>Explore how different materials sink and float. (EYFS)</p>	<p>wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2- Uses of everyday materials)</p> <p>Find out how shapes from social objects made from some materials can be changed by bending, squashing, twisting and stretching. (Y2 – Uses of everyday materials)</p>	<p>Only building materials are materials.</p> <p>Only writing materials are materials.</p> <p>The word ‘rock’ describes an object and not a material.</p> <p>Solid is another word for hard.</p>
Throughout the year	<p>Seasons</p> <p>Research Using secondary sources of information to answer scientific questions.</p> <p>Pattern-seeking Identifying patterns and looking for relationships in enquiries where variables are difficult to control.</p> <p>Observation over time Observing changes that occur over a period of time ranging from minutes to months.</p>	<p>By the end of this unit children will be able to:</p> <p>Name the seasons and the time of year associated with them.</p> <p>Talk about and notice the seasons throughout the year.</p> <p>Talk about and describe the seasons.</p> <p>Talk about what we do to adapt to different seasons e.g. clothes, activities, physical environment, food, different plants and animals etc.</p>	<p>Understand the key features of a life cycles of a plant and animal. (EYFS)</p> <p>Explore the natural world around them.</p> <p>Describe what they can see, hear and feel whilst outside. (EYFS)</p> <p>Understand the effect of changing seasons on the natural world around them. (EYFS)</p>	<p>Recognise that light from the sun can be dangerous and there are ways to protect their eyes. (Y3 – Light)</p> <p>Use the idea of the Earth’s rotation to explain day and night and the apparent movement of the sun across the sky. (Y5 – Earth and Space)</p>	<p>Some children may think:</p> <p>It always snows in winter.</p> <p>It is always sunny in the summer.</p> <p>There are only flowers in Spring and Summer.</p> <p>It rains most in Winter.</p>

