



**Spring term**  
**Unit Overview: KS1 Science**  
**Plants and Seasonal Changes**

<p><u>National Curriculum Objectives</u></p> <p><u>Plants</u></p> <p>Y1</p> <ul style="list-style-type: none"> <li>❖ Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.</li> <li>❖ Identify and describe the basic structure of a variety of common flowering plants.</li> </ul> <p><u>Seasonal changes</u></p> <p>Y1</p> <ul style="list-style-type: none"> <li>❖ Observe changes across the four seasons.</li> <li>❖ Observe and describe weather associated with the seasons and how day length varies</li> </ul>	<p><u>Substantive knowledge</u></p> <ul style="list-style-type: none"> <li>❖ Identify local plants with specific names by looking at the key characteristics of the plant.</li> <li>❖ Plants have common parts, but they vary between the different types of plants. Some trees keep their leaves all year while other trees drop their leaves during autumn and grow them again during spring.</li> <li>❖ In the UK, the day length is longest at mid-summer (about 16 hours) and gets shorter each day until mid-winter (about 8 hours) before getting longer again.</li> <li>❖ The weather also changes with the seasons.</li> <li>❖ In the UK, it is usually colder and rainier in winter, and hotter and dryer in the summer. The change in weather causes many other changes.</li> </ul>	<p><u>Vocabulary</u></p> <p>Leaf, flower, blossom, petal, fruit, berry, root, seed, trunk, branch, stem, bark, stalk, bud, Weather (sunny, rainy, windy, snowy etc.), Seasons (winter, summer, spring, autumn), Sun, sunrise, sunset, day length.</p> <p><u>Phonics / polysyllabic words</u></p> <p>Autumn - /m/          Summer - /mm/          Evergreen - /v/          Deciduous - /s/</p>
<p><u>Working Scientifically Skills</u></p> <ul style="list-style-type: none"> <li>❖ Identifying and classifying</li> <li>❖ Observing closely</li> <li>❖ Record data to help answer questions</li> </ul>	<p><u>Disciplinary knowledge</u></p> <ul style="list-style-type: none"> <li>❖ Go on a season's walk around the school grounds to identify different plants and animals.</li> <li>❖ Label the key features of a plant.</li> <li>❖ Go on a scavenger hunt to see which creatures inhabit different areas throughout the seasons.</li> <li>❖ Make a daily weather chart and analyse the weather patters in our area.</li> </ul>	<p><u>Reading support</u></p> <ul style="list-style-type: none"> <li>❖ Word mats</li> <li>❖ Scaffolded recording / choice of recording</li> <li>❖ Pre teaching of vocab</li> </ul> <p><u>Extension: deeper thinking</u></p> <ul style="list-style-type: none"> <li>❖ Name some common native plants including wild plants and trees.</li> <li>❖ Describe in simple terms the function of the different parts of flowering plants and trees.</li> <li>❖ Chart the growth of bulbs and/or seeds.</li> </ul>
<p><u>Possible misconceptions</u></p> <p>Some children may think:</p> <ul style="list-style-type: none"> <li>❖ It always snows in winter. It is always sunny in the summer.</li> <li>❖ There are only flowers in spring and summer.</li> <li>❖ It rains most in the winter.</li> <li>❖ Plants are flowering plants grown in pots with coloured petals and leaves and a stem.</li> <li>❖ Trees are not plants.</li> <li>❖ A trunk is not a stem.</li> </ul>		



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<p><u>Prior learning</u></p> <ul style="list-style-type: none"> <li>❖ Plant seeds and care for growing plants. (Nursery – Plants)</li> <li>❖ Understand the key features of the life cycle of a plant and an animal. (Nursery – Plants)</li> <li>❖ Begin to understand the need to respect and care for the natural environment and all living things. (Nursery – Plants)</li> <li>❖ Explore the natural world around them. (Reception – Living things and their habitats)</li> <li>❖ Recognise some environments that are different to the one in which they live. (Reception – Living things and their habitats)</li> <li>❖ Describe what they see, hear and feel whilst outside. (Reception – Seasonal changes)</li> </ul> <p>Understand the effect of changing seasons on the natural world around them. (Reception – Seasonal changes)</p> <p><u>Future learning</u></p> <ul style="list-style-type: none"> <li>❖ Identify and name a variety of plants and animals in their habitats, including microhabitats. (Y2 - Living things and their habitats)</li> <li>❖ Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers. (Y3 - Plants)</li> <li>❖ Investigate the way in which water is transported within plants. (Y3 - Plants)</li> <li>❖ Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light)</li> <li>❖ 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)</li> </ul>	<p><u>British Values</u></p> <ul style="list-style-type: none"> <li>❖ <u>Democracy:</u> Teamwork during science investigations</li> <li>❖ <u>The rule of law</u> Understand the importance of safety rules when working scientifically make choices when planning an investigation as others may have different points of view as to where to start.</li> <li>❖ <u>Individual Liberty:</u> Choice to join a club-science club/ Justifying conclusion from experiments, respecting other people’s results / Devising own ways to present ideas and solutions / Allow children to develop their independence, offering them opportunities to follow their own ideas and interests / Ensure that all children engage in a wide range of activities and are not limited by gender or other stereotypes. gender or other stereotypes.</li> <li>❖ <u>Tolerance</u> Scientific discoveries have come from other cultures and religious beliefs often compete with scientific understanding.</li> <li>❖ <u>Mutual respect</u> Work as a team, discuss findings and Offer support and advice to others.</li> </ul>	<p><u>Key People</u></p> <ul style="list-style-type: none"> <li>❖ Carl Linneaus – Botanist who categorised all living organisms</li> </ul> <p><u>Christian Values</u></p> <ul style="list-style-type: none"> <li>❖ <u>Courage</u> Asking our own questions and investigating new ideas.</li> <li>❖ <u>Respect</u> Supporting other’s ideas, even if they differ to our own.</li> <li>❖ <u>Trust</u> Celebrating everyone’s unique ideas and working together collaboratively.</li> </ul>
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DOWN AMPNEY PRIMARY SCHOOL

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❖ The seasons and the Earth's tilt, day length at different times of year, in different hemispheres. (KS3)		
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