

## *OLC learners know it, show it, think it, prove it.*

### Science: Seasonal changes

<b>Vocabulary</b>	anemometer evergreen Northern Hemisphere Sun animal fog precipitation sun cream autumn fruit rain sunglasses Beaufort Scale gale rainfall sunrise blossom grow rain gauge sunset breeze hail rays temperature bud hibernate season thermometer cloud hurricane seasonal change weather dark leaf sleet weather forecast daytime light snow wind deciduous meteorologist spring windsock dormant migrate storm winter Earth night time summer	<b>Prior Learning: (EYFS)</b>	<u>Understanding of the World:</u> <ul style="list-style-type: none"> <li>The weather is colder in winter and sometimes it snows. In winter the evenings get darker earlier.</li> <li>The number of daylight hours varies throughout the year, according to the season. The days are longer in summer and shorter in winter.</li> <li>Winter is a season, it comes after autumn. The weather is colder in winter with more snow, hail and rain.</li> <li>Spring is a season. It comes after winter and before summer.</li> <li>Spring weather is changeable. It can be warm, cold, sunny, rainy and even snowy.</li> <li>The weather and local environment changes with the seasons.</li> <li>Spring weather is changeable. It can be warm, cold, sunny, rainy and even snowy.</li> </ul>
<b>Know It: essential knowledge</b>	<ul style="list-style-type: none"> <li>There are four seasons: winter, spring, summer, and autumn.</li> <li>Each season has different weather.</li> <li>Some trees lose their leaves in autumn and winter—these are called deciduous trees.</li> <li>Other trees keep their leaves all year—these are called evergreen trees.</li> <li>Days are longer in summer and shorter in winter.</li> <li>The weather can change every day. Some types of weather are sunshine, rain, wind, snow, fog, and lightning.</li> <li>It is usually hotter in summer and colder in winter.</li> </ul>		
<b>Think It: discernment, oracy and RUAH)</b>	<b>RUAH</b>	<b>Oracy</b>	<b>Discernment</b>
	How can we respect nature in every season? How do animals and plants adapt to seasonal changes? What do I love about each season? Why might some people find different seasons difficult? How do we help plants and animals in different seasons?	Comparing seasons Verbally explain the different changes they notice Discussion - How does the weather change how we live? If I had to explain the seasons to someone new, I would say...	Why do you think God made different seasons? How do seasons help living things? What should we do when the weather makes life harder for the other people? How can we stay safe in bad weather? How can we look after God’s creation during all seasons?
<b>Prove It: assessment)</b>	<ol style="list-style-type: none"> <li>1. How many seasons are there?</li> <li>2. What are the four seasons?</li> <li>3. What happens to deciduous trees in autumn and winter?</li> <li>4. How are evergreen trees different from deciduous trees?</li> <li>5. Are days longer in summer or winter?</li> <li>6. What kind of weather do we see in spring?</li> <li>7. Is the weather the same every day?</li> </ol>		
<b>Beyond Year 2</b>	<ul style="list-style-type: none"> <li>A light source is something that produces light.</li> <li>A reflector is something that reflects light.</li> <li>Light is a form of energy that travels in straight lines from a light source.</li> </ul>		

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	<ul style="list-style-type: none"> <li>• Dark is the absence of light and we need light to be able to see.</li> <li>• The main natural light source on Earth is the Sun.</li> </ul>		
<b>Lesson Sequence</b>	Lesson 1	Intro K/ Engage	The four seasons
	Lesson 2	Engage	Experiencing the season
	Lesson 3		Deciduous and evergreen trees
	Lesson 4		Seasonal changes in deciduous trees
	Lesson 5		Seasonal changes in animals
	Lesson 6		What is the weather?
	Lesson 7	Develop	Day length
	Lesson 8		Sun's rays
	Lesson 9		Measuring and recording the wind
	Lesson 10		Measuring and recording the temperature
	Lesson 11		Measuring precipitation
	Lesson 12		Weather forecasting
	Lesson 13	Innovate/express	Assessment and Spring predictions

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<b>Show It: scientific skills and concept s</b>	<b>Questioning</b>	<b>Investigation</b>	<b>Gather and Record Data</b>	<b>Measurement</b>
	<p><b>Year 1 Skill</b> Ask simple scientific questions.</p> <p><b>Year 2 Skill</b> Ask and answer scientific questions about the world around them.</p> <p><i>Question words include what, why, how, when, who and which.</i></p>	<p><b>Year 1 Skill</b> With support, follow instructions to perform simple tests and begin to talk about what they might do or what might happen.</p> <p><b>Year 2 Skill</b> Follow a set of instructions to perform a range of simple tests, making simple predictions for what might happen and suggesting ways to answer their questions</p> <p><i>Simple tests can be carried out by following a set of instructions.</i></p>	<p><b>Year 1 Skill</b> With support, gather and record simple data in a range of ways (data tables, diagrams, Venn diagrams).</p> <p><b>Year 2 Skill</b> Use a range of methods (tables, charts, diagrams and Venn diagrams) to gather and record simple data with some accuracy.</p>	<p><b>Year 1 Skill</b> With support, use simple equipment to measure and make observations.</p> <p><b>Year 2 Skill</b> Use simple equipment to measure and make observations.</p>
	<b>Observation</b>	<b>Report and Conclude</b>	<b>Staying safe</b>	<b>Identify and classify</b>
	<p><b>Year 1 Skill</b> Observe objects, materials, living things and changes over time, sorting and grouping them based on their features.</p> <p><b>Year 2 Skill</b> Observe objects, materials, living things and changes over time, sorting and grouping them based on their features and explaining their reasoning.</p>	<p><b>Year 1 Skill</b> Talk about what they have done and say, with help, what they think they have found out.</p> <p><b>Year 2 Skill</b> Begin to notice patterns and relationships in their data and explain what they have done and found out using simple scientific language.</p> <p><i>Results are information that has been found out from an investigation.</i></p>	<p><b>Year 1 skill</b> Describe ways to stay safe in some familiar situations.</p> <p><i>Using sun cream and wearing a hat helps you to stay safe in the Sun.</i></p>	<p><b>Year 1 Skill</b> Identify, compare, group and sort a variety of common wild and garden plants, including deciduous and evergreen trees, based on observable features.</p> <p><i>Plants are living things.</i></p> <p><i>Trees are large, woody plants and are either evergreen or deciduous. Trees that lose their leaves in the autumn are called deciduous trees.</i></p>
	<b>Living Things</b>	<b>Forces</b>	<b>Earth</b>	<b>Changes</b>
	<p><b>Year 1 Skill</b> Describe, following observation, how plants and animals change over time.</p> <p><i>Deciduous trees change across the four seasons.</i></p> <p><i>Changes happen to animals across the four seasons.</i></p>	<p><b>Year 1 Skill</b> Investigate weather using toys, models or simple equipment.</p> <p><i>Simple equipment can be used for measuring weather including windsocks, thermometers and rain gauges.</i></p>	<p><b>Year 1 Skill</b> Observe and describe different types of weather.</p> <p><b>Year 2 Skill</b> Describe features of Earth using words and pictures.</p> <p><i>Wind strength is measured by the Beaufort Scale.</i></p>	<p><b>Year 1 Skill</b> Observe and describe how day length changes across the year.</p> <p><i>Day length is the number of hours of daylight.</i></p> <p><i>Day length is longer in the summer months and shorter in the winter months in the UK.</i></p>

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			<p><i>Different types of weather include sunshine, rain, hail, wind, snow, fog, lightning, storm and cloud.</i></p> <p><i>The weather can change daily and some weather types are more common in certain seasons, such as snow in winter.</i></p>	
	<b>Pattern Seeking</b>		<b>Habitats</b>	
	<p><b>Year 1 Skill</b> Observe changes across the four seasons.</p> <p><b>Year 2 Skill</b> Describe typical UK seasonal weather patterns.</p> <p><i>The four seasons are spring, summer, autumn and winter.</i></p> <p><i>Certain events and weather patterns happen in different seasons.</i></p>		<p><b>Year 1 Skill</b> Observe the local environment throughout the year and ask and answer questions about living things and seasonal change.</p> <p><i>The local environment is a habitat for living things and can change during the seasons.</i></p>	