





Science – Seasonal Change

**NB**  
Seasonal change will also be ongoing throughout the year with observations/discussions.

Term 3	Learning Question & NC Link	Substantive Knowledge To know that...	Disciplinary Knowledge I can...	Vocabulary	Assessment opportunity	Equipment & resources	Lesson ideas
Session 1 <b>Observing</b>	<p><b>What are the 4 seasons?</b></p> <p><b>What changes happen in each of the seasons?</b></p>	<p>Know that there are 4 seasons. To know that Harvest time is in Autumn. Know that plants and flowers start to grow. Know that baby lambs are born. Know that leaves fall from the trees in Autumn. Know that the leaves change colour. Know that conkers fall from conkers trees. Know that animals hibernate. Know that temperatures drop and it is colder. Know that it is warm in Summer. Know that we wear lighter clothes in Summer to keep us cool. To know that skies can be overcast. To know that birds migrate to warmer climates in Autumn. To know that in Autumn leaves change colour and start to fall from trees. To know that in Autumn animals begin storing up food for the Winter. To know that in Autumn temperatures drop and it gets darker earlier because there is less sunlight.</p>		<p>Seasons; spring, summer, autumn, winter</p>	<p>Adult to record child responses on post-its. Assess against key assessment questions.</p>	<p>Posters of the seasons/photographs</p>	<p><b>Seasons and change</b> Learn the 4 seasons – share 4 seasons song Identify and talk about changes that occur in each season and link to own experiences. Go for a seasons walk in the school grounds – Look for signs of Autumn. Make links to class identity (animals e.g. hedgehogs). Decorate a tree with Autumn colours – this will be added to in each new season. *Take a photograph of a tree in our school garden at each season – discuss the changes through the year.</p>
Session 2 <b>Asking simple questions and recognising they can be answered in different ways</b>	<p><b>What changes happen in each of the seasons?</b></p> <p><b>What happens in Autumn?</b></p> <p><b>What happens in Spring?</b></p> <p><b>What happens in Summer?</b></p> <p><b>What happens in Winter?</b></p>	<p>To know the 12 months of the year. To know that Spring is from March to May. To know that summer is from June to August. To know that Autumn is from September to November. To know that Winter is from December to February. To know that many plants stop growing. To know that some trees lose all their leaves. To know some animals including hedgehogs and tortoises hibernate. To know that in Spring, flowers begin to grow. to know that Spring is associated with rebirth and growth. To know that some baby animals are born (e.g. lambs, chicks). To know that in Summer, it is the hottest time of the year.</p>	<p>To be able to put the 12 months in order of the year. To be able to discuss what different types of weather are like. To use their senses to describe the different types of weather. To be able to classify clothing for different types of weather/climate. To be able to describe different types of weather.</p>	<p>Year, months, days</p> <p>Seasons; spring, summer, autumn, winter</p>	<p>Adult to record child responses on post-its. Assess against key assessment questions.</p>	<p>Interesting objects Variety of paper Question stems</p>	<p><b>Months of the Year</b> Learn the months of the year – using a song or chant.  Sequence the months of the year on a washing line or children holding them in a line.  Identify what months fall in which season.  Discuss weather in each season, clothing we would wear and activities we might do depending on the season/time of the year.  Illustrate the seasons with weather, clothing, related object or activities/events.  Record pupil comments in books about each season.</p>
Session 3 <b>Identify and classify</b>	<p><b>What is the weather like?</b></p>	<p>To know that in Spring, the temperatures rise and the ground starts to warm up. To know that there are different types of weather- rain, sun, storms, overcast.</p>	<p>To observe closely and record observations.</p>	<p>Hot, warm, mild, cold Sunny Cloudy Rain, sleet, snow, hail, thunder, lightning, rainbow Wet, damp, dry Windy, breezy, gust</p>	<p>Adult to record child responses on post-its. Assess against key assessment questions.</p>	<p>Photos of weather</p>	<p><b>Different types of weather</b> To discuss and observe different types of weather – go outside and observe and watch video of extreme weather.  Sort/match different types of weather to different types of clothing.  Carry out the cloud on the jar experiment – discuss and record observations.  What happened? What did you see?</p>

<p>Session 4</p> <p><b>Gather and record data to help in answering questions</b></p>	<p><b>How can we measure the weather?</b></p>	<p>To know that the weather can be measured using different types of equipment.</p>	<p>To be able to observe and measure the weather. To be able to investigate rainfall over a period of time. To be able to observe and measure rainfall over time. To carry out a simple test to measure and record rainfall. To record in a simple chart or table.</p>	<p>Temperature Degrees Celsius Thermometer Weather vane Anemometer Cloud names – stratus, cumulus, cirrus</p>	<p>Adult to record child responses on post-its. Assess against key assessment questions.</p>	<p>Cotton wool 1 litre bottle Ruler, tape, Rain chart</p>	<p><b>Rain/clouds</b> Look at and name different ways of measuring weather – weather sock, vein, anemometer – Put pictures in the science bag.</p> <p>Discuss different types of weather – when is it wettest in the year? What season? Month?</p> <p>Make a class rain gauge and place outside to collect rainfall. How can we measure rainfall?</p> <p>Make a class rain chart to record the rainfall over a week.</p> <p>Observe/measure changes over time – link to enquiry poster 'Investigation over time'</p> <p>Explore the names of different clouds and make with cotton wool.</p> 
<p>Session 5</p> <p><b>Performing simple tests</b></p>	<p><b>What is happening in the experiment?</b></p>	<p>To know that we sometimes see snow, frost in the morning, sleet blizzards and hail.</p>	<p>To be able answer questions about what we have found out. To observe closely and record observations. To perform simple tests.</p>	<p>Hot, warm, mild, cold Sunny Cloudy Rain, sleet, snow, hail, thunder, lightning, rainbow Wet, damp, dry Windy, breezy, gust Test, experiment, table/chart</p>	<p>Adult to record child responses on post-its. Assess against key assessment questions.</p>	<p>See activities</p>	<p><b>Snow</b> Carry out the snow storm in a jar experiment.</p> <ul style="list-style-type: none"> <li>• Large jar</li> <li>• Vegetable oil</li> <li>• Blue or white paint</li> <li>• Blue or white glitter</li> <li>• <a href="#">Alka-Seltzer tablets</a></li> <li>• Water</li> </ul> <p>Observe changes, discuss vocab, and encourage questioning.</p> <p>Record observations/finding in science books. Label and adult to add annotations as pupil voice. What have we found out?</p>
<p>Session 6</p> <p><b>Performing simple tests</b></p>	<p><b>How can we melt the ice?</b></p>	<p>To know that water freezes to ice. To know that Winter is the coldest time of the year. To know that we sometimes see snow, frost in the morning, sleet blizzards and hail.</p>	<p>To record in a simple chart or table. To be able answer questions about what we have found out. To perform simple tests. To observe closely.</p>	<p>Hot, warm, mild, cold Sunny Cloudy Rain, sleet, snow, hail, thunder, lightning, rainbow Wet, damp, dry Windy, breezy, gust</p>	<p>Adult to record child responses on post-its. Assess against key assessment questions.</p>	<p>Ice, salt, sugar, hot water</p>	<p><b>Ice</b> How can we melt ice ?</p>  <p>Explore different ways of melting ice. Record observations/findings using pictures and labels. Write a simple explanation about which melted the ice the quickest/best. Record results in a simple chart/table.</p>
<p>Notes</p>							