


Mendell Primary School


Aspire Challenge Achieve


Medium Term Plan Science





Year Group: 1	Term: Summer 2	Teacher: Miss Morning	Subject lead: Sarah Bride	Overview: Seasonal Change – Spring/Summer <ul style="list-style-type: none"> Observe changes across the four seasons. Observe and describe weather associated with the seasons and how day length varies. 	Key End Points: By the end of this unit children will be able to: <ul style="list-style-type: none"> Name the seasons and the time of year associated with them. Talk about and notice the seasons throughout the year. Talk about and describe the seasons. Talk about what we do to adapt to different seasons e.g. clothes, activities, physical environment, food Talk about the plants and animals of different seasons and what they do. Compare seasons. 			
Common Misconceptions: Some children may think: <ul style="list-style-type: none"> it always snows in winter it is always sunny in the summer there are only flowers in spring and summer it rains most in the winter. 		Unit key Vocabulary: <ul style="list-style-type: none"> Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length 		<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="background-color: #0056b3; color: white; padding: 2px; font-size: 8px;"> Comparative / fair testing <small>Changing one variable to see its effect on another, whilst keeping all others the same.</small> </div> <div style="background-color: #008000; color: white; padding: 2px; font-size: 8px;"> Research <small>Using secondary sources of information to answer scientific questions.</small> </div> <div style="background-color: #ff0000; color: white; padding: 2px; font-size: 8px;"> Observation over time <small>Observing changes that occur over a period of time ranging from minutes to months.</small> </div> <div style="background-color: #00b0f0; color: white; padding: 2px; font-size: 8px;"> Pattern-seeking <small>Identifying patterns and looking for relationships in enquiries where variables are difficult to control.</small> </div> </div>				
Links to other learning:	Prior Learning: Understand the key features of the life cycle of a plant and an animal. (Nursery – Plants & Animals, excluding humans) Explore the natural world around them. Describe what they see, hear and feel whilst outside. Understand the effect of changing seasons on the natural world around them. (FS2 – Seasonal Change)	Future Learning: Recognise that light from the sun can be dangerous and that there are ways to protect their eyes. (Y3 - Light) <ul style="list-style-type: none"> 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) The seasons and the Earth's tilt, day length at different times of year, in different hemispheres. (KS3) 	High Quality Text: One year with Kipper – Mike Inkpen Scientist to study:		Risk Assessment/Health and safety	Teacher CPD: PLAN ASE Ryan Unit of work. Reach Out CPD - https://www.reachoutcpd.com/ sign up for free.		
<u>Learning Intention</u>	<u>Lesson Outline (Key Questions in colour)</u>			<u>Resources</u>	<u>Vocabulary</u>	<u>Lowest 20% Adaptations</u>		
1	L.I. I can identify signs of Spring 	This is a Science lesson. In Science, we study nature and the behaviour of natural things. The skill we will be using this lesson is making observations. Prior learning: What are the four seasons? What is the weather like in winter?			Poem springtime WAGOLL poster	Spring, new life, blossom		

		<p>How do we know when it is autumn? What do some animals do in winter? – hibernate or migrate.</p> <p>Big Question: What changes happen in Spring?</p> <p>Explorify: what's going on? Spring Flowers video.</p> <ul style="list-style-type: none"> Do they know what might happen based on the image? <p>After you've watched the video, lead a discussion with your class:</p> <ul style="list-style-type: none"> What happens when seasons change? How does this relate to the life cycle of a plant? How do the plants respond to changing seasons? Can they see these spring plants around the school or at home? <p>Ask the class to describe what they saw using only one word. Show the children the following video and ask them to think about what signs of Spring they can see? https://www.youtube.com/watch?v=vLAnt9_5Mg refer to the class book and their Spring time walk. What signs of spring did we see? Discuss what changes the children noticed about plants and animals. Children can make notes on whiteboards or the video can be paused and things discussed as a class.</p> <p>Share the poem Springtime Magic and discuss what other clues and signs we might see during springtime. What does the poem tell us about animals? The weather? Plants and trees?</p> <p>Model to the children or present a WAGOLL poster- page split into four sections labelled weather, clothes, signs of Spring and plant and trees. Draw images and add labels and sentences to explain what we should wear in springtime, what the plants and trees might look like, the weather and any other signs such as baby lambs etc...</p>			
2	<p>L.I. I can set up a simple test to find the temperature in spring and summer</p> 	<p>This is a Science lesson. In Science, we study nature and the behaviour of natural things. The skill we will be using this lesson is setting up simple tests and recording data.</p> <p>Prior learning:</p> <p>What are the four seasons? What is the weather like in autumn? How do we know when it is winter?</p> <p>Big Question: What is the temperature in Spring and Summer?</p> <p>Explorify: Mellow Yellow – Odd One Out</p>	<p>A sturdy plastic or wooden box that can stand on its side</p> <p>White paint</p> <p>Thermometers</p> <p>Sticky tape</p> <p>Instructions see resources.</p>	<p>temperature , thermometer patterns data, Spring, Summer</p>	

		<p>Show the three images above and ask everyone to come up with as many similarities and differences as they can. If they get stuck, prompt them to think about:</p> <ul style="list-style-type: none"> • appearance • what they do • where they might be found <p>Encourage discussion linked to background science found on the Explorify website underneath the activity explanation e.g. similarities – all plants differences – different seasons.</p> <p>Word of the week: thermometer – discuss with the children what they already know about temperature. Do they know how it is measured? Degrees Celsius What equipment would we need to measure the temperature outside?</p> <p>Explain to the children that we will be monitoring the temperature outside over the next few weeks – but how can we make sure our thermometer doesn't get wet or broken? Explain that a way of protecting thermometers is to use a thermometer box. Show the children a range of materials and the instruction sheet. Allow the children to make a thermometer box in groups. Discuss the best place for our thermometer boxes.</p> <p>Discuss with the children what they predict might happen to the weather over the next few weeks – do the children realise the season is changing from spring to summer? When do we normally get the warmer weather in England?</p> <p>Ask the children to draw a table for their results after recording their predictions. Record the temperature for that day after modelling to the children how to read the thermometer.</p> <p>Take the temperature daily for the next two weeks. Ask the children to look for patterns in the temperature is the weather getting warmer? Is the temperature warmer in spring or summer? Were their predictions correct?</p>			
3	<p>L.I. I can explain how to stay safe in the sun.</p> 	<p>This is a Science lesson. In Science, we study nature and the behaviour of natural things. The skill we will be using this lesson is making observations and communicating information.</p> <p>Prior learning:</p> <p>What three months are in Winter? Autumn? Spring? Summer?</p> <p>Does our class teddy go to bed at the same time every night?</p> <p>What changes happen in autumn?</p> <p>Big Question: How can we keep safe in Summer?</p>	<p>Staying safe in the sun resources.</p>	<p>Sun, rays, safe, safety, sun cream, sunglasses, sun hat, shade, water, hydrated, dehydrated, protect.</p>	

		<p>Ask the children what sort of things they do in summer. What is the weather like in summer? What do they do outside? What do you wear outside in the summer? Do you do anything before you go to play outside? What should you do if you get too hot outside?</p> <p>Discuss all the different activities the children typically do during the summer, like playing outside, having a BBQ etc... ask the children to discuss the statement the sun is dangerous – what do they children know or understand about this? Ask children how can we stay safe in the sun? Discuss the ideas the children come up with through discussions. If the children are struggling for ideas you might want to use some picture prompts to aid discussion e.g. show a range of resources including things we need for different seasons e.g. umbrella, sun cream, hat, sun glasses, wellies, raincoat, winter coat etc...</p> <p>Discuss all the ways we can protect ourselves in the sun inducing clothing and sun cream. Go through all the different protection strategies and explain how they protect you from the sun and why they are important to do. E.g. sun glasses as sun light can harm our eyes.</p> <p>Can children say why it is important to stay safe in the sun? Can they explain why it's never safe to look directly at the sun?</p> <p>Task: ask the children to make a staying safe in the sun poster giving advice to other children about how to stay safe – see resources for suggestions. Can children tell you why it is important to stay safe in the sun? Are children able to tell you three ways to stay safe in the sun?</p> <p>Exit pass: sun safety quiz.</p>			
4	<p>L.I. I can find out how day light is different in each season.</p> 	<p>This is a Science lesson. In Science, we study nature and the behaviour of natural things. The skill we will be using this lesson is making observations and recording date.</p> <p>Prior learning:</p> <p>What are the four seasons? What three months are in Winter? Autumn? Spring? Summer? Do you know any events that happen in these months?</p> <p>Big Question: How does the amount of daylight change in each season?</p> <p>Show the children season videos and ask them to identify the season and explain how they know. Discuss what we have already found out about autumn, winter and spring so far.</p> <p>Explain to the children that the weather isn't the only thing that changes during the seasons, the amount of daylight changes too. Refer back to the class teddy and what time he goes to bed. What patterns have the children spotted? Using the PowerPoint explain how the changes in when the sunrises and sets across the seasons.</p>	Day length PowerPoint.	Sun, sunrise, sunset, day length	

		<p>Look at the table, what do children notice about the average number of hours of daylight during each seasons? Are children able to tell you how many hours of daylight there are in summer/autumn, winter, spring? How do the hours in summer compare with the number of hours of daylight in the spring? If the days in the summer are longer then encourage children to think about what happens to the nights. Do children know what happens to the nights in summer?</p> <p>Show the children a range of activities in different season can they suggest what season it is happening in? e.g. birthday party at 6pm in summer it is light outside/in winter it is dark outside.</p> <p>Task: show the children the average amount of daylight for each season and ask them to represent this data in a pictogram using the resources provided. Ask the children to answer the following questions to show that they have understood the data: which season has the most amount of daylight? Which season has the least about of daylight?</p> <p>Challenge: provide the children with additional data and ask them to answers the questions.</p>			
5	<p>L.I. I can explain what happens during each season.</p>  	<p>This is a Science lesson. In Science, we study nature and the behaviour of natural things. The skill we will be using this lesson is communicating information.</p> <p>Prior learning: What three months are in Winter? Autumn? Spring? Summer? Do you know any events that happen in these months? What do some animals do in the winter? - hibernate or migrate. Summer walk plants and animals trees drawing temperature investigation</p> <p>Big Question: What do we know about all four seasons? – post topic assessment.</p> <p>As a class play the game when is it? You can play this whole class by asking the questions and getting the children to select their answer cards or you can play it as a quiz quiz trade type matching pair's activity where each child pairs up with their answer/question card.</p> <p>Explain to the children that they will be explain to the FS2 children everything they have found out about the four season this year. The children need to create a season wheel to include features of each season, this could include some or all of the following: Season need to be in the correct order. Show changes to flowers and trees. Show what animals do in winter and spring. Show the months within each season. Show what clothes or accessories we might need in each season</p>	<p>When is it game resources.</p> <p>Season wheel template.</p>	<p>Weather (sunny, rainy, windy, snowy etc.) Seasons (winter, summer, spring, autumn) Sun, sunrise, sunset, day length</p>	