

TERM 2 OVERVIEW YEAR 1 and 2 – Science

Term 2 Book – The Man on the Moon

Topic(s) – Seasonal Changes (Focussing on Autumn & Winter)		Guide Time = 6 lessons and 1 assessment
Assessment:	Unit overview assessment week 7	Very Important Points (VIPs): To know the months of the year. Autumn is the season which follows summer but comes before winter. In the United Kingdom September, October and November are the months of autumn. Autumn is the time when deciduous trees (trees which lose their leaves every year) shed their leaves. The leaves turn from green to red, orange, brown or yellow and fall to the ground. In autumn lots of animals, such as squirrels, collect and store extra food so they have some left for winter, when it's much harder to find food. Autumn is the time for harvest. Winter is the season that follows autumn but comes before spring. In the United Kingdom December, January and February are the months of winter. Winter is the season with the shortest days and the lowest temperatures. In the United Kingdom winter is the season when the year ends and a new year begins. Fat Questions: What would the world be like if we only had one season?
Links to prior learning (sequencing) and canon book	Children in year 1 have learnt the differences within the four seasons. Children in year 2 have gathered information about the weather and created weather forecasts from their findings. Children should be able to build on their prior knowledge of grouping and classifying different objects based on appearance. Children should have prior knowledge of working scientifically skills of asking questions and grouping and classifying.	
Links to other learning (cross fertilisation)	Maths - time and data handling, recording and gathering results during the Scientific Experiment English - a written explanation of observations. - learning new vocabulary. - asking questions Geography- natural disasters Art - making paper Mache solar system. -linking back to what is the weather like in space? <u>The World Beyond us</u> Is there seasons in space? How do astronauts know what the weather is going to be like when returning home? <u>Healthy Bodies Healthy Minds</u> How does the sun make you feel? How does the weather affect outdoor activities? <u>The Word Around Us</u> How is the weather different around the world in December?	

	<p>How are the seasons different? For example how is our winter different to Australia's winter?</p> <p>Culture</p> <p>How have humans contributed to the change of weather? (global warming)</p> <p>Why does Halloween happen in autumn?</p> <p>Why do Christians celebrate the harvest festival in autumn?</p> <p>Modern Britain</p> <p>What do we use to measure the weather?</p> <p>How do we predict what the weather is going to be like?</p> <p>How has predicting weather evolved?</p> <p>Have there been any new discoveries to predict weather warnings?</p> <p>Technology In Action</p> <p>What forms of technology do we use to measure and record the weather?</p> <p>How would we know what the weather is going to be like?</p>	
<p>Links to future learning</p>	<p>This unit will support the children's learning when moving into LKS2 science unit, in particular;</p> <p>Year 4; Living things and their habitats, States of matter, Year 3; Plants, Animals including humans, Rock, Light</p>	
<p>Character/Wider Development ('50 things', cultural capital, skills)</p>	<p><u>Visit from Wicked Weather Watch</u> – This will allow children to hear directly from those who have witnessed climate change first hand. The volunteers have either travelled to the Arctic or are experts in climate change, will tell children about their adventures and experiences.</p> <p><u>Observe weather</u> – Children to be resilient when observing the weather outside. Link back to 'The Man on the Moon' and how he was resilient. They will be able to see the different jobs perspectives as a result of learning been exposed to these activities.</p>	

OVERVIEW OF TEACHING SEQUENCE

Key Facts/Learning	Learning Focus or Key Question	Learning Outcomes (NC)	Key Words/ Vocabulary	Opportunity for GD and SEN	Misconceptions	Activities and Resources Deepening the Moment
<p>Lesson 1 – To know the months of the year.</p> <p>Autumn is the season which follows summer but comes before winter.</p> <p>In the United Kingdom September, October and November are the months of autumn.</p> <p>Winter is the season that follows autumn but comes before spring.</p> <p>In the United Kingdom December, January and February are the months of winter</p>	L.O- To name and order the 4 seasons.	<p>Observe changes across the four seasons.</p> <p>Asking simple questions and recognising that they can be answered in different ways.</p>	Spring Summer Autumn Winter Seasons Four January February March April May June July August September October November December Months Twelve	<p>SEN Practical activity - Children to cut and stick the seasons in the correct order (with adult support if possible) Give children support cards to remind them of each one. Take pictures of children working and allow children to talk with each other as opposed to writing things down.</p> <p>GD Children to confidently know the months of the year and events that happen. Pose questions to children based on their understanding e.g. Could bonfire</p>	<p>Children may think that:</p> <p>A month of the year is a season.</p> <p>There are more/less than four seasons.</p> <p>It is sunny in winter.</p>	<p>Starter https://www.youtube.com/watch?v=VYpGBtR8Lbs</p> <p>Mix-Pair-Share Discuss with your partner- What happens in spring? What happened in summer? What happens in autumn? What happens in winter?</p> <p>Year 1 – Children to order the 4 seasons. SEN- Cut and stick seasons with pictures to help.</p> <p>AR- Children to write what the four seasons are and something that happens. For example- In spring the weather turns warmer and plants start to flower.</p> <p>GD- Children to include months of the year and the months they happen in. E.g. Spring- Easter- March/April</p> <p>Year 2- Children to order the 4 seasons and months of the year. SEN- Cut and stick seasons with pictures to help. Children to draw/stick pictures of events that happen in the 4 seasons.</p> <p>AR- Children to write what the four seasons are and something that happens. For example- In spring the weather turns warmer, trees begin to grow their leaves, plants start to flower and young animals such as chicks and lambs are born. Easter takes place in spring and it lands in April and sometimes March.</p>

				<p>night be in summer? Why? Can you have a BBQ in the winter? Why?</p>		<p>Literacy skills (titles, subtitles, questions such as 'Did you know..?') See slides for examples.</p> <p>Resources: Pencils, pictures of the four seasons.</p> <p>Other useful resources: https://www.youtube.com/watch?v=VYpGBtR8Lbs</p> <p><u>Deepening the Moment</u> What is your favourite season and why?</p>
<p>Lesson 2 – To identify signs of autumn.</p> <p>Autumn is the time when deciduous trees (trees which lose their leaves every year) shed their leaves.</p> <p>The leaves turn from green to red, orange, brown or yellow and fall to the ground. Autumn is the time for harvest.</p> <p>Conkers fall from the trees. The weather gets cooler in autumn.</p>	<p>L.O- To observe changes across the 4 seasons by going on an autumn walk.</p>	<p>Observe changes across the 4 seasons.</p> <p>Observing closely, using simple equipment.</p>	<p>Observe Signs Record Leaves Conkers Conker husks Acorns Seeds Pine cones Blackberries Season Seasonal Autumn Winter Cool Wind Rain Snow Cold</p>	<p>SEN Children to take photos using an iPad or the different signs of autumn. Take pictures of children working and allow children to talk with each other as opposed to writing things down.</p> <p>GD Promote child to 'team leader' in their group, whose job it is to oversee the autumn walk and challenge their peers with questions to further their learning/thinking.</p>	<p>Children may think that:</p> <p>There are more than four seasons.</p> <p>The weather is the same in all seasons.</p> <p>Sun is a sign of autumn.</p>	<p><u>Starter</u> https://youtu.be/R_tadm4uaQ4 Group quiz- Guess the season. Could use whiteboards, paper etc.</p> <p>Year 1- Children to work in pairs to spot different signs of autumn. When children have spotted a sign of autumn tick it off their list. If they find something which isn't on the list, draw a picture and label it in the space at the bottom of the sheet.</p> <p>Year 2- Children to work in pairs to spot different signs of autumn. When children have spotted a sign of autumn draw a picture and label it.</p> <p>Ext: Children to write an observation from their autumn walk. On my autumn walk I saw... On my autumn walk I felt... On my autumn walk I could smell...</p> <p>Resources: Pencils, clipboard per pair, cameras/tablets (if available), coats.</p>

				Extend through writing about their observation when back in class.		<p>Relevant outings and trips resources in line with your school policy and procedures e.g. medication, first aid kit etc.</p> <p>Other useful resources: https://youtu.be/R_tadm4uaQ4</p> <p>Deepen the moment: Always. Sometimes. Never. Harvest must happen in autumn. Prove it!</p>
<p>Lesson 3- Winter is the season with the shortest days and the lowest temperatures.</p> <p>Weather affects what we wear.</p> <p>To describe how changes to the weather affects humans.</p>	<p>L.O- To describe how weather/temperature changes affect humans (e.g. clothing)</p>	<p>Observe and describe weather associated with the seasons and how day length varies</p> <p>Use their observations and ideas to suggest answers to questions</p>	<p>Autumn Winter Cold Heavy rain Snow Strong winds Showers Foggy</p>	<p>SEN Children to have support with step by step method of completing task. Children to cut and stick how the weather affects what clothing humans wear. Take pictures of children working and allow children to talk with each other.</p> <p>GD Children to extend their sentences further by writing if humans need to be aware of anything. E.g. In the winter beware of ice! It can be very dangerous.</p>	<p>Children may think that:</p> <p>Winter is the season with the longest days.</p> <p>You need to wear wellies in winter.</p>	<p>Year 1- Children to complete activity sheet. Looking at the different weather forecasts children to write/draw- What you can wear Activities you can do Weather- Heavy rain, snow, strong winds, sunny first then rain showers, foggy etc. Differentiated sheet.</p> <p>Year 2- Children to write how the weather and temperature affects humans. Example- If you go outside in the heavy rain you need to wear a rain coat and some wellies so you don't get wet. If you want to have fun you can splash in puddles or make a rain stick.</p> <p>Resources: Pencils, book.</p> <p>Other useful resources: https://youtu.be/R_tadm4uaQ4</p> <p>Deepen the moment: Sam says 'You need to wear wellies in autumn.' Do you agree with her statement? Give reasons for your answer.</p>

<p>Lesson 4 – To name 3 animals which adapt to cope with winter weather.</p> <p>To describe how a chosen animal adapts to cope with winter weather.</p>	<p>L.O- To observe changes across the seasons by exploring how some animals adapt to survive in winter.</p>	<p>Observe and describe weather associated with the seasons and how day length varies</p> <p>Use observations and ideas to suggest answers to questions.</p>	<p>Adapt Adaption Cope Survive Hibernate Hibernation Migrate Migration</p>	<p>SEN Children match the animals with what they do in the winter. Provide children with word mat using images to support to explain the different words. Children work in a small group with an adult- this will allow them time to discuss their ideas and work at a pace they are comfortable with.</p> <p>GD Children to challenge each other using what they have learnt to write a 'What am I' animal. Other children to guess what winter animal they describe.</p>	<p>Children may not understand:</p> <p>What hibernation means.</p> <p>What migrate means.</p> <p>What appearance means.</p>	<p>Autumn brings a host of ripening fruit and vegetables harvested by humans and wild animals alike.</p> <p>Watch https://www.bbc.co.uk/teach/class-clips-video/how-autumn-weather-affects-the-behaviour-of-british-animals-and-plants/z6h6nrd - clip shows all the exciting things that happen during this season. Mice and squirrels can be seen gathering and storing nuts. Deciduous trees lose their leaves which provide food for worms, fungi and slime molds. Visiting birds such as swallows gather to migrate abroad, while geese arrive from cold countries to overwinter here. As the days shorten, humans enjoy Halloween and Bonfire Night. The weather begins to get worse and heavy rains swell rivers and cause flooding. Frost covers the countryside and as much of the wild food runs out, some mammals begin hibernation.</p> <p>Year 1- differentiated sheet (could do straight into books if you don't want to use work sheets using subheadings etc.) SEN- Children match the animals with what they do in the winter. AR- Children draw an animal from each category and write a brief sentence to explain what they do in winter. Draw three different animals and write about what they do in winter. 1 animal which hibernates; 1 animal which migrates; 1 animal which changes its appearance.</p> <p>Year 2- differentiated sheet (could do straight into books if you don't want to use work sheets using subheadings etc.) SEN- Children match the animals with what they do in the winter. AR- Children choose an animal and describe what it does to survive in winter and why. (Children could describe a different animal if they complete one.)</p>
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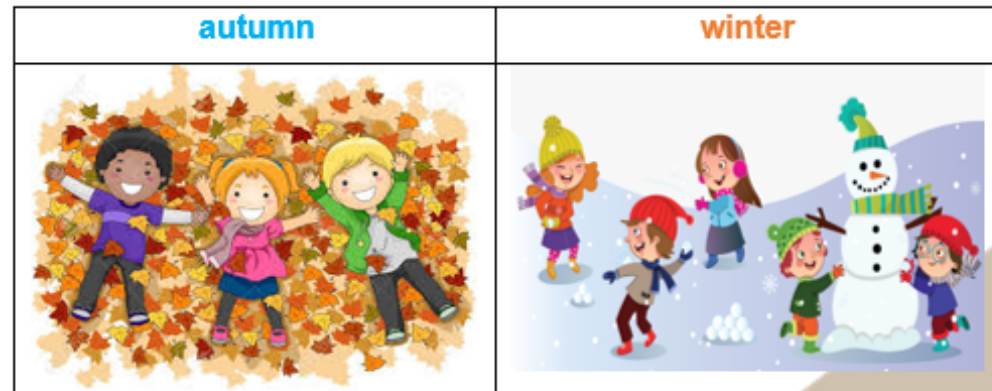
						<p>Ext. Children to challenge each other using what they have learnt to write a 'What am I' animal. Other children to guess what winter animal they describe.</p> <p>Plenary- Animals in winter quiz. Children could work in pairs or groups on whiteboards.</p> <p>Resources: Pencils, differentiated worksheets, whiteboards, pens, board rubbers.</p> <p>Other useful resources: https://www.bbc.co.uk/teach/class-clips-video/how-autumn-weather-affects-the-behaviour-of-british-animals-and-plants/z6h6nrd</p> <p>Deepen the moment: How would animals need to adapt if we only had winter? Explain your answer.</p>
<p>Lesson 5 – Autumn is the season which follows summer but comes before winter.</p> <p>Autumn is the time when deciduous trees shed their leaves.</p> <p>The leaves turn from green to red, orange, brown or yellow and fall to the ground.</p>	<p>L.O- To sort objects/pictures into autumn and winter.</p>	<p>Observe changes across the 4 seasons.</p> <p>Identifying and classifying.</p>	<p>Investigate</p> <p>Explore</p> <p>Look</p> <p>Autumn</p> <p>Winter</p> <p>Weather</p> <p>Trees</p> <p>Leaves</p> <p>Conkers</p> <p>Acorns</p> <p>Clothing</p>	<p>SEN</p> <p>Provide children with word mat using images to support to explain the different words. Children work in a small group with an adult to complete the experiments. Children should assigned jobs to encourage an active role in the experiment rather than simply observing. Adult to take</p>	<p>Children may think that:</p> <p>Conkers are acorns.</p> <p>Autumn is winter.</p> <p>A colourful tree is a winter tree.</p> <p>A bare tree is an autumn tree.</p>	<p><u>Starter</u></p> <p>Zoom in on some autumn and winter pictures. Children to guess what they are.</p> <p>All- Children to investigate and sort which objects/pictures are autumn and which are winter.</p> <p><u>Ext.</u></p> <p>Children to write questions to challenge their peers. E.g. Which season would you find bare trees? Which season would you see snow? What is the weather like in autumn?</p> <p>Resources: Conkers, acorns, leaves tree photos, clothing photos, iPad to take photographs of children working as a team and sorting pictures/objects.</p>

<p>In autumn lots of animals, such as squirrels, collect and store extra food so they have some left for winter, when it's much harder to find food.</p> <p>Autumn is the time for harvest.</p> <p>Winter is the season that follows autumn.</p>				<p>picture/record discussion as opposed to getting children to write.</p> <p>GD Children to write questions to challenge their peers. E.g. Which season would you find bare trees? Which season would you see snow?</p>		<p>Deepen the moment: True or false? Conkers grow in winter. Explain your answer.</p>
<p>Week 6 & 7</p>	<p>Consolidation Week & End of unit assessment – Seasons</p>					
<p>Context (big picture learning)</p> <p>Children should be able to describe weather types including wind, rain, sun, fog and snow. Children should be able to describe each season and the associated weather conditions. Despite our weather being very changeable, it is possible to identify certain characteristics of our four seasons. In autumn temperatures cool leading to winter where temperatures are often at their lowest. Winter can sometimes bring snow.</p>						

Folder name: Trust shared > Primaries > Departments > KS1 > Planning Cycle B > Autumn 2 > **Science**

Knowledge Organiser

Key Vocabulary	
seasons	There are four seasons each year, autumn , winter , spring and summer.
autumn	In autumn , the weather begins to get colder. The leaves start to fall from the trees. The amount of daylight becomes less. This means the daytimes are shorter and the night times are longer.
winter	In winter , the weather is much colder. Sometimes it is cold enough to freeze, leaving frost and ice on the ground. It sometimes snows. Many trees have bare branches as all their leaves have fallen off. The daytimes are shortest in the year and the night times are the longest.
weather	The weather includes the temperature outside, the wind direction and strength, as well as rain, cloud, snow and sun.
daylight	Daylight is when it is light outside. The amount of daylight changes with each season .



The Four Seasons	
autumn September October November	winter December January February
spring March April May	summer June July August

Daylight hours each month:

Month	September	October	November	December	January	February	March	April	May	June	July	August
Hours of daylight	13	11	9	8	8	10	12	14	15	16	16	14

