

<b>Year 1 – Seasonal Changes</b>	<b>Main Outcomes:</b> <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>	<b>Focus:</b> Science - physics
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<b>What should I already know?</b> <ul style="list-style-type: none"> <li>The names of the different seasons.</li> <li>What the weather would be like in the different seasons.</li> </ul>
<b>What I will do</b> <p>I will have weekly or blocked science lessons. In lessons, I will be taught a skill and I will gain knowledge and understanding through the process of scientific enquiry (observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources).</p> <p><u>Possible lines of enquiry</u></p> <ul style="list-style-type: none"> <li>Make tables and charts about the weather.</li> <li>Make displays of what happens in the world, including day length, as the seasons change.</li> </ul>

Vocabulary	Meaning
autumn	the <b>season</b> where the leaves fall
blizzard	a <b>snowstorm</b>
breeze (breezy)	a light <b>wind</b>
cold	when the <b>weather</b> is getting chilly, like in the <b>winter</b>
damp	slightly wet
day	part of the day when <b>Earth</b> is facing the <b>Sun</b>
Earth	the planet on which we live
fog (foggy)	when it is really <b>misty</b> and you can't see well
forecast	predict something in advance
hail/ice/snow	frozen droplets of water
hibernate	to enter a sleep-like state for the <b>winter</b>
hot	when the <b>sun</b> is shining and it creates heat like in the <b>summer</b>
hour	a length of time (60 minutes)
gale	a very strong <b>wind</b>
lightning	electrical flashes of light
mist (misty)	a cloudlike mass of water droplets that make it hard to see
night	part of the day when <b>Earth</b> is facing away from the <b>Sun</b>
orbit	to travel around
rain/drizzle	droplets of water that come from clouds
season	a time of the year relates to the <b>weather</b> ; there are 4 seasons
sleet	a mixture of <b>snow</b> and <b>rain</b>
spring	the <b>season</b> where flowers begin to blossom and some animal babies are born
storm	a heavy fall of <b>rain, snow, hail</b> or a violent outbreak of thunder and lightning
summer	the hottest <b>season</b> when the <b>sun</b> shines
Sun (sunny)	a big yellow star in the sky that creates heat and light
thunder	a loud, explosive noise in the sky
unpredictable	not expected (not forecast)
warm	when the <b>weather</b> is starting to get warmer, like in the <b>spring</b>
weather	how <b>hot</b> or <b>cold</b> it is and what is happening in the sky
wind (windy)	when the <b>weather</b> blows the trees
winter	the coldest <b>season</b> (when Christmas is)

<b>Resources</b> <p>Hamilton Science planning: Seasonal Changes (all planning also saved on SharePoint).  <a href="https://www.hamilton-trust.org.uk/science/year-1-science/seasonal-changes-wonderful-weather/">https://www.hamilton-trust.org.uk/science/year-1-science/seasonal-changes-wonderful-weather/</a></p>
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## Knowledge and Skills Map – Science at Estcots School

Knowledge to understand		Skills to learn
As the <b>seasons</b> change the environment will change around us.	<ul style="list-style-type: none"> <li>• <b>Winter</b> – deciduous trees are bare of leaves; the <b>days</b> are short (with the shortest <b>day</b> in December); the <b>weather</b> is <b>cold</b>; some animals <b>hibernate</b>.</li> <li>• <b>Spring</b> – trees start to grow their leaves; the <b>weather</b> gets warmer; some baby animals such as lambs are born.</li> <li>• <b>Summer</b> – trees are full of leaves; the <b>days</b> are longer (with the longest <b>day</b> in June); the <b>weather</b> is warmer; there are lots of flowers which attract insects.</li> <li>• <b>Autumn</b> – leaves change colour and fall from deciduous trees; the <b>weather</b> gets colder; plants stop growing; crops are harvested.</li> </ul>	<ul style="list-style-type: none"> <li>➤ asking simple questions and recognising that they can be answered in different ways</li> <li>➤ observing closely, using simple equipment</li> <li>➤ performing simple tests</li> <li>➤ identifying and classifying</li> <li>➤ using their observations and ideas to suggest answers to questions</li> <li>➤ gathering and recording data to help in answering questions</li> <li>➤ drawing diagrams to explain something</li> </ul>
There are many different <b>weathers</b> that come with each <b>season</b> .	<ul style="list-style-type: none"> <li>• <b>Rain..Drizzle..Damp</b> – water falls from the sky.</li> <li>• <b>Fog..Mist</b> – it is difficult to see things; it can be dangerous to drive.</li> <li>• <b>Windy..Breezy..Gales</b> – things get blown around</li> <li>• <b>Sunny..Warm..Hot</b> – the <b>Sun</b> makes the <b>weather</b> warmer; it gets warmest in the <b>summer</b>.</li> <li>• <b>Snow..Cold..Ice..Blizzard</b> – it is very <b>cold</b>; it can <b>snow</b> in the <b>winter</b>.</li> <li>• <b>Stormy</b> - <b>rain, snow</b> or <b>hail</b> falls heavily, or there is a violent outbreak of <b>thunder</b> and <b>lightning</b></li> </ul> <p>Often the <b>weather</b> in the UK is <b>unpredictable</b>. That means that even in <b>winter</b> we have <b>sunny</b> days, and in the <b>summer</b> it can <b>rain</b> and get <b>cold</b>.</p>	<p>Cross-curricular (maths and geography)</p> <ul style="list-style-type: none"> <li>➤ comparing, describing and solving practical problems for capacity and volume</li> <li>➤ measure and begin to record capacity and volume</li> <li>➤ recognise and use the language of time</li> <li>➤ use world maps, atlases and globes to identify the UK and its countries</li> <li>➤ use simple compass directions</li> <li>➤ begin to construct simple pictograms, tally charts, block diagrams and tables</li> </ul>
The length of sunlight in a <b>day</b> changes with the <b>seasons</b> .	<p><b>Autumn</b> – clocks go back an hour  <b>Spring</b> – clocks go forward an hour  <b>Summer</b> – longer <b>days</b> and shorter <b>nights</b>  <b>Winter</b> – shorter <b>days</b> and longer <b>nights</b></p> <p>The <b>Earth</b> spins around once every <b>24 hours</b>. When a side of the <b>Earth</b> is facing the <b>sun</b>, it is <b>daytime</b> on that side. When a side of the <b>Earth</b> is facing away from the <b>sun</b>, it is <b>night</b> time on that side.  <b>Night</b> and <b>day</b> are affected by the <b>seasons</b>. The <b>Earth</b> is tilted at an angle. It takes the <b>Earth</b> one year to <b>orbit</b> the <b>Sun</b>. When we are tilted towards the <b>Sun</b>, it is <b>summer</b>. We have long <b>days</b> and short <b>nights</b>. When we are tilted away from the <b>Sun</b>, it is <b>winter</b>. We have short <b>days</b> and long <b>nights</b>.</p>	<p><b>Equipment to become familiar with</b></p> <p>Cameras  Torches  Globes  Rain gauges (including those which are child-made)  Measuring jugs  Wind socks and wind vanes  Compasses (with support)  Thermometers (with support)</p>

Evidence of Learning	How will I know what I've learnt?
Science books Photos Videos Pupil conferencing Teaching and learning observations Learning walks Data analysis	<p>See KS1 teacher assessment exemplification for science</p> <p><a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763062/2018_key_stage_1_teacher_assessment_exemplification_science.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763062/2018_key_stage_1_teacher_assessment_exemplification_science.pdf</a></p> <p>See also Hamilton Science_Assessment_Y1 (saved in planning folder on Sharepoint).</p> <p>KS1 science quizzes:</p> <p><a href="https://gcequiz.com/quiz/ks1-science-quizzes">https://gcequiz.com/quiz/ks1-science-quizzes</a></p> <p><a href="https://www.woodendprimaryschool.com/year-1/">https://www.woodendprimaryschool.com/year-1/</a></p>