

Video	Central or big idea	Think, work and apply like a geographer	Questions to explore	Key learning outcomes
<p>KS2 Geography. Exploring UK locations: Weather, climate and seasons</p>	<p>Aspects of weather can be measured and monitored over time.</p>	<ul style="list-style-type: none"> • Compare • Predict • Cause and effect • Connect 	<ul style="list-style-type: none"> • What is weather? • What different types of weather are there? • What affects the weather of a place? • How can weather be measured? • What is the difference between weather and climate? • Is the climate the same everywhere on Earth? • What causes different climate zones? • What's your favourite type of weather, and why? • How does the weather affect your life, what you can do, and where you can go? • Can you think of different jobs or industries that are affected by the weather? For example, farmers rely on a good balance of rain and sun for crop growth. • What kind of climate would you like to live in? • What affects the climate of an area? • What is the equator, and how does it affect climate? • What is climate change, and how does it affect the weather? • What are some examples of extreme weather? • How do you feel about climate change and its effects? 	<ul style="list-style-type: none"> • To know how to take measurements. • To know that there are different types of weather due to a number of different factors. • To know that climate is the average weather conditions across at least 30 years. • To know that the different climate zones link to distance from the equator. <p><i>Suitable for teaching geography at KS2 in England, Wales and Northern Ireland, and 2nd level in Scotland.</i></p>
<p>Key geographical vocabulary and definitions</p>			<p>Suggested learning opportunities</p>	<p>Ideas for going further and links</p>
<p>Carbon dioxide - otherwise known as CO₂. It's a greenhouse gas that's linked to global warming. Climate - the average conditions and weather patterns of a place over a long period of time, usually 30 years.</p>			<p>1. Weather chart: Pupils could take on Rhys' challenge and find out what the weather is like in their local area by creating their own weather diary, recording the different weather each day for a week:</p>	<p>Learn about the Earth's different climate zones and how these link to the flora and fauna found.</p>

Key geographical vocabulary and definitions	Suggested learning opportunities	Ideas for going further and links
<p>Climate change - the process of our planet getting warmer, otherwise known as global warming, caused by human activities such as burning fossil fuels like oil and gas.</p> <p>Equator - an imaginary line that runs around the middle of the Earth which is always closest to the sun. A lot of places near the equator have a tropical climate which means it's very hot and wet. Places furthest away from the equator have a polar climate which means it's very cold.</p> <p>Extreme weather - unusual, bad weather that can have disastrous effects on communities like flooding and wildfires. Examples of extreme weather include blizzards, hurricanes, heatwaves and droughts.</p> <p>Flooding - the overflow of water onto land that is usually dry.</p> <p>Greenhouse gas - gas that traps and absorbs heat radiated from the earth, and rather than releasing it into space, keeps our planet warm and contributes to global warming.</p> <p>Pollution - when the environment is harmed or dirtied by waste or chemicals. There are three main forms of pollution: air, water, and land, although in cities noise pollution can also be impactful.</p> <p>Temperate climate - areas of the planet characterised by mild temperatures that lack extremes - the UK climate would be classified as temperate.</p> <p>Tropics - the region of Earth surrounding the Equator. The Tropic of Cancer is the Northern boundary and the Tropic of Capricorn is the Southern one.</p> <p>Weather - the day to day conditions of a certain area, for example if it's sunny or rainy.</p>	<ul style="list-style-type: none"> • Draw a chart with a column for the days of the week, with each day (Monday-Sunday) written on a separate row. In another column write 'weather'. Each day, pupils can draw symbols in the 'weather' column to document what the weather was like that day. • The weather could be recorded once a day, in the morning and evening, or even every hour. • Temperature could be recorded with a thermometer each day at specific time/s of day. • The rainfall could be measured by placing a beaker outside and measuring the amount of water that fills it each day. • A rough measure, for comparison's sake, of cloud cover can be made by noting down the percentage of the sky that is cloudy: the same location should be used each day. • Finally, the amount of wind can also be measured, using bubble mixture to create bubbles and timing how long the bubbles take to drift across a metre of ground (if they just drop there is no wind). <p>2. Cloud creations There are four main different types: cumulus, cirrus, stratus, and nimbus. Pupils could use cotton wool, glue, and grey paint/felt-tip pens to create each type of cloud on a large piece of paper with name and description labels:</p> <ul style="list-style-type: none"> • Cirrus clouds - look like wispy feathers or tufts of hair. In the daytime they are whiter than any other cloud in the sky. • Cumulus clouds – puffy and fluffy. Often with a white top and a darker bottom. • Stratus clouds – flat sheets which are usually low-level and form near to the ground. • Nimbus clouds – what we call clouds when there is rain or snow falling out of them. They are often dark grey. <p>Having created a key, pupils can take it outside to help classify the different types of clouds they can identify in the sky. They could see whether they could take photographs of the different types and even keep a track of how many times, and on which days, they see each type of cloud to see if there is a pattern.</p>	<p>Compare climate maps to observe changes to climate and climate zones linked to human activity.</p> <p>KS1/KS2 Primary Geography: The seasons</p> <p>KS1/KS2 Primary Geography: Weather, climate and climate change</p>