

# Y2 How does your garden grow?

## Geography

Learning Objective	Teaching and Learning	Outcome/s
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**Engage!**  
 (Science Engage would ordinarily be to set up a vegetable plot – perhaps not possible currently)  
 Explain to the children that this half term we are going to be learning about weather patterns and climate.  
 We are going to be observing how weather changes, and to help us do that we are going to make some weather instruments.

Sun catchers: <https://babbleddabledo.com/art-for-kids-cosmic-suncatchers/>  
 Rain Gauge: <https://www.twinkl.co.uk/resource/t-g-102-make-a-rain-gauge-craft-instructions>  
 Wind streamer: Hamilton Trust <https://www.hamilton-trust.org.uk/topics/key-stage-1-topics/weather-experts/meteorologists/>



To locate hot and cold places in the world in relation to the Equator

<https://www.bbc.co.uk/teach/class-clips-video/geography-ks1--ks2-climate/zjdtbtk>  
 Show the children a world map. Can anyone tell you where the Equator is? Show children on the map. Explain that, generally, the world's hottest places are at or near the Equator, where the midday sun is high in the sky. It is down to the solar radiation they receive – not because they are closer to the Sun. Where do you think the coldest places will be? Why?  
 Identify the North and South pole and explain that these are the coldest places, where the Sun never rises very high above the horizon.  
 Explain that this idea does become more complicated, depending on cloud, wind and ocean currents. This is how we get different climates.  
 What is weather? How is weather different to climate?  
 Explain that climate is simply a long-term weather pattern, which depends on temperature, rainfall, wind and sunshine.

Children atlases and maps climate maps to create their own climate maps showing hot and cold places in the world.



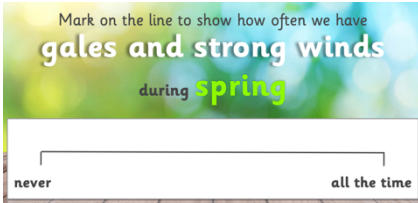



To collect and organise simple data




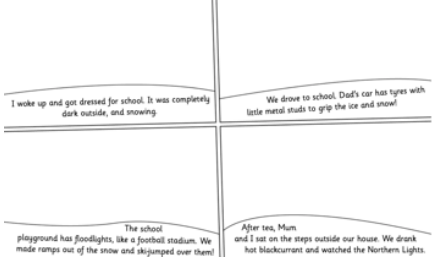
How does weather vary day to day? Why?  
 Discuss the changes that can cause variation in temperature etc.  
 How much does our weather vary? Explain to the children that we are going to set up a data collection to show how much the weather varies from day to day in Thetford. What equipment will we need?  
 How will we record our findings?  
 Remind children of the equipment they made on our Engage day – how could we use these?  
 Show children the **Beaufort Scale** – how could we use this to measure the wind and record our data?  
 Children to decide on a number and corresponding key vocabulary each day

Children set up data collections – rain collection stations, data loggers for temperature etc.

	Wind direction	Wind strength	Rainfall (cm)	Sunshine	Temperature
Monday	north	light breeze	none	very sunny	hot
Tuesday	east	moderate breeze	3 cm	not sunny	cold

Children add what data they are collecting to their tables and could begin to discuss predictions  
**Review findings at the end of the topic**

<p>To describe weather patterns</p>	<p>Show children the Powerpoint (attached)          What climate does the UK have? What does this mean? What type of weather will we see across the year? Recap the difference between weather and climate?</p> <p>What words can you think of to describe the weather? Add to working wall.          Does our climate change? Can the weather change? Is it always sunny in the summer?</p> <p>Show children the weather lines, between now and all the time. In winter, how often are we likely to have rain? Sun? How will this change in the summer?</p>	<p>Children add arrows to the spectrums to show the likelihood of each type of weather in the UK.</p> <p>Explain that our data collection will also help us to see these patterns in each season.</p> 
<p>To describe the different weather patterns of the UK</p>	<p>Recap the climate of the UK and what we learnt in the last lesson about changes in weather.          What is the climate of the UK? Is this the same for all of the countries? Why?          Explain that the UK has variable weather that changes from day to day between different regions and within different regions. Consequently, it is very difficult to predict or forecast the weather.</p> <p>Is weather the same for all of the countries? Is the temperature the same for example? Why not?          Show children some example temperatures in summer and winter for London or Cornwall and for example Perth in Scotland.</p> <p>Explain that this is in part because of the different winds that meet over the country. For example Scotland has winds from the Arctic and the south of England receives tropical, warmer winds from Mediterranean Europe.</p>	<p>Children take on the role of weather forecasters from different seasons. (See resources)</p>  <p>Create an A3 map of the UK and add weather symbols to show what weather they would expect in that season. How would it vary from country to country? Why? Children film their weather forecasts and share with the class.</p>
<p>To describe the human and physical features of Brazil</p>	<p><a href="https://www.youtube.com/watch?v=LSoXrR2Xec4">https://www.youtube.com/watch?v=LSoXrR2Xec4</a>          Explain that now we are going to look at a contrasting place, from outside of Europe.          As a class, look at a globe or atlas to locate rainforest regions, and then zoom in on Brazil. Show the Action Aid map. What do you notice about the rainforest?</p>  <p>Why do you think this is? What must the climate be like? Refer back to the world map completed earlier in the unit. <b>How does the climate help plants/the rainforest to grow?</b>          Show pictures of the rainforest and discuss the climate: it is always hot, but, unlike the desert, temperatures stay remarkably steady. Rainfall is also distributed fairly evenly.</p>	<p><a href="https://www.actionaid.org.uk/school-resources/resource/ks1-rio-de-janeiro-brazil-package">https://www.actionaid.org.uk/school-resources/resource/ks1-rio-de-janeiro-brazil-package</a>          Children sort photos into human and physical features.          Can they link the physical features to the climate?</p> 

<p>To describe the settlements of Brazil</p>	<p><a href="https://www.bbc.co.uk/bitesize/topics/zyhp34j/articles/zr2h47h">https://www.bbc.co.uk/bitesize/topics/zyhp34j/articles/zr2h47h</a>          What is the capital of Brazil? Why is Rio de Janeiro more well-known/famous? Why do you think more people visit Rio each year? Look at the map and ask children to think about why this might be. As well as being visited by many tourists, it also has the second highest population. Why do you think that is?          Show children the pictures of Rio. Why might people want to visit there or live there?          Would you want to live there? Look at the images of houses and discuss.          Model looking at the key vocabulary words and matching them to the images. What other words could I add?</p>	<p>Children match key words to the photographs of Rio de Janeiro. What can they tell you about the settlements? The climate? The human and physical features. Children choose 3/4 images to include in their book and label them with the key words from the word bank and words of their own.</p> 
<p>To describe the weather patterns of the polar regions</p>	<p>Explain that today, we are going to look at another contrasting climate.          As a class, look at a globe or map to locate the polar regions and today's focus place of Tromso in Norway. Is it nearer to the North Pole, South Pole or the Equator? What climate will it have?          Show children photos from these areas and talk about the cold, snow and ice. Explain that the winter nights are very long and that in many places the sun does not rise for months on end. It is also exceptionally cold. It also has days in the summer where the sun doesn't set.  <b>Do we think that plants will grow easily here? Why? Why not? Will the type of plants be different to those that we saw in Brazil? Why? Why not?</b></p>	<p>What would you need to pack for a trip to Tromso in winter? Why?</p> <p>Children pack a suitcase to cope with the contrasting climate of Tromso</p> 
<p>To describe what is like to live in a contrasting climate to the UK</p>	<p>What is winter like in this country? What words could you use to describe it?          Show children the cartoon of a day in the life of a child in the UK, in the winter.          What weather features can you spot?          How do we deal with the snow?          What are the clues that tell us that this is winter?          How would this be different to summer in the UK?          Now ask the children to think about the day in the life of a child in Tromso. How would the images be different? Why? What might they have in place to deal with the snow? Why have they got these and we have not?</p> 	<p>Children add pictures/words to create a diary of a child living in Tromso. How do they cope with the snow? How does the weather change through the day?</p> 
<p>To understand the similarities and differences of an area in the UK and contrasting places</p>	<p>Explain to the children that today they are going to be given the choice of countries to complete their work on: Brazil or Norway (Tromso)          Show children the Venn diagram. Explain that anything that is similar about the climates can go in the middle. Anything that is different can go on the outside.          Show children some example sentences: e.g., There is less daylight in the winter months          Where would this sentence go? Why?          Can you think of a sentence that would not go in the middle? Why?</p>	<p>Venn Diagram          What do your two chosen places have in common? What is different about them? Provide children with sentences or pictures to sort into their Venn diagrams.          Where would you prefer to live? Why?</p>

## Express!



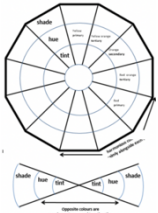
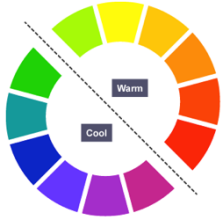
### Travel Agents!

Set up a travel agent role play! Children must choose one of the countries we have been learning about and create an advert for that place. It could be a leaflet, a poster, a piece of artwork or even a TV advert. It must include:

- Information about the climate
- Information about weather patterns
- Activities to do there based on these
- Plant life/animal life
- Other interesting facts they find during their research



Art

Learning Objective	Teaching and Learning	Outcome/s
<p>To express thoughts and feelings about a piece of art</p>	<p>Show children images of different murals, including (from the Knowledge Curriculum – Last Supper, Crivelli’s Garden, Pool of Bethesda)                      But also thought provoking and modern murals (appropriate Banksy, Keith Haring)                      Introduce the terms: <b>fresco composition mural</b>                      Looking at the pictures – what do you think a mural is?                      What do you think of each mural? What do you like/dislike about them? What are they trying to show?</p> 	<p>Children add images of different pieces of art to their art books and add key vocabulary to the pieces.                      Ask them to add faces or key words to explain their thoughts about a piece.</p> <p>At the end ask them to describe their favourite, and attempt to recreate a part of it.</p> <p>My favourite mural is _____ because _____ .</p>
<p>To understand the colour wheel</p>	<p>Remind children of their learning about colour during the ‘What unites the Kingdom’ topic. What did we learn? What are primary colours? What are secondary colours? How do you make them?                      Show children the colour wheel and explain that this is often used in art to show the relationship between colours. Explain that we are going to be using this colour wheel in our artwork this half term, so we need to have a go at creating our own. Model adding both primary and secondary colours to the wheel – ensure that children know the importance of the colours going in the correct places.</p>	<p>Children use their chosen medium to create their own colour wheels.</p> <p>Remind them of their learning in the previous half term – how to create those secondary colours.                      Record in books for use later in the unit.</p> 
<p>To develop use of shades and tones</p>	<p>In Year 1, children should have learnt about tints and shades. What is a tint? What is a shade? Recap what children can remember from last year.                      Model using the white and black paint to create different tints and shades of the colours on the wheel.                      Why might these be used? When might you want to use a tint? What type of picture might you use a shade in?</p>	<p>Children add black or white to their colours to create their colour wheel with tints and shades.                      (This could perhaps be done over two lessons – 1 tint and 1 shade)</p> 
<p>To express links between colour and emotion</p>	<p>Show children examples of paintings: Castle and Sun by Paul Klee, Cow by Andy Warhol, The Old Guitarist by Picasso which show either hot or cool colours. What do you notice?</p> <p>Then show them the painting The Red Buoy by Paul Signac. What is different about this painting? (it uses both) and Houses of Parliament by Monet. Which colours are cool? Which are warm? Do tint or shades affect this?</p>	<p>Draw pictures/record everything that helps them think of that colour as a warm or cool colour.                      Could give them words or pictures to sort, or they could paint or draw them, e.g. fire, ice, the sun etc.</p> 



To express links between colour and emotion

Show children the book *Story Orchestra: Four Seasons* and play them clips of the each piece of music. Can they match the piece to the season? How about to the piece of art? e.g.

What climates could these pieces also be expressing? Why?

Which of the countries that we have learnt about could they be expressing?

Model listening to a piece of music (either from 4 seasons or different) and model choosing colours to add to the paper. Will you choose hot or cold colours? Why? How can you vary your work by adding tints and shades of your chosen colours?

Children share their work – might be best to choose one season or complete this task over several lessons.

Once they have filled the paper, model cutting up the piece and rearranging the shapes they have made to create a pattern or abstract image – see next box.



Paint what they can hear (4 seasons)

What climates could they also be expressing? Why? Which of the countries that we have learnt about could this piece of music match to? Which colours come to mind?

Steps:

- Listen to music
- Choose colours to match the music
- Paint tints and shades of that colour onto paper
- Cut the paper up
- Rearrange the shapes to create an interesting image or pattern
- Children could even rearrange these shapes into continent outlines, to begin to show the climate zones they have been learning about



## Express!

### World map Mural showing different climates

Children use the artwork created in the last session as inspiration to create a class mural to show the world climate zones. The idea would be to create this map in this style, using the other images as inspiration. Use as a class display to showcase their learning.

