

SSCA Draft Climate Change Curriculum 2023



The curriculum is divided into these key areas: What is it? What causes it? What are its impacts? What can we do? What can I do? and What if we do nothing?

These are taught in all Year groups from Reception to Year 6. The curriculum is designed to deepen children's understanding of climate change as they progress through the school towards the endpoint of **Sustainable Citizen**. The illustration to the right demonstrates some key areas of understanding.

There is currently no specific climate curriculum on the national curriculum. Our climate change curriculum is based on Climate Change Explained 2019 [UK Government], Schools Sustainability Guide 2022 [WWF] and Big Ideas for Climate Change 2022, a draft curriculum designed using the UN's Sustainable Development Goal for Climate Action [Leeds Development Education Centre]. It is a cross-curricular mix of explicit and climate learning linked to wider enquiries within other subjects.

Curriculum

What can I do?
Walking/ cycling
Recycling
Single use plastic
Energy efficiency
Biodiversity in school
Food choices
Litter pick/ beach clean

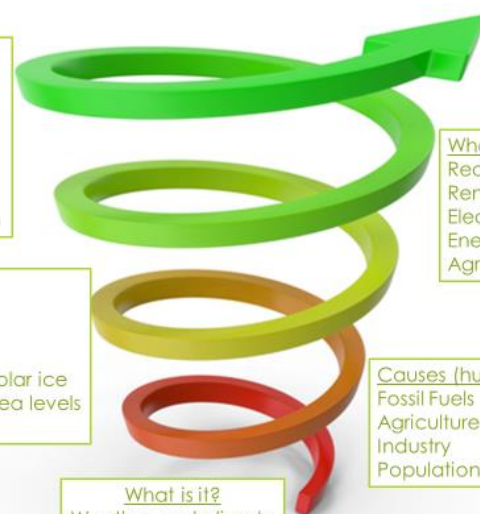
Impact
Farming
Ecosystems
Biodiversity
Warming oceans, polar ice and glaciers, rising sea levels
Extreme Weather

What is it?
Weather and climate

Causes (humans)
Fossil Fuels
Agriculture and deforestation
Industry
Population

What can we do?
Reduce fossil fuels /
Renewable energy
Electric transport
Energy efficient buildings
Agriculture

What if we do nothing?
Tipping points



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Focus	Coverage
What is Climate Change	<p>YF – Understanding the world. Introducing pupils to vocabulary to describe their immediate environment, weather and ecosystems. Comparing features of their immediate environment with those of others. Science – Seasonal changes - introducing pupils to the weather and seasonal changes; discussing clothing for different weather. History – Explorers - discussing and comparing different environments.</p> <p>Y1 – Science. Seasonal changes. Pupils will begin to understand the concept of weather and to form a solid foundation for studying climate. Observing changes over the seasons, describing weather patterns and how the day length varies.</p> <p>Y1 – Geography. How does the weather affect our lives? Pupils will build on their understanding of the concept of weather for forming a solid foundation for studying climate. Pupils will be encouraged to investigate how weather affects them as individuals on a daily and seasonal basis. They will also explore how weather affects people in other locations around the world.</p> <p>Y1 – Geography. Why don't penguins need to fly? Introducing pupils to the concept of biomes and natural regions which they will study in greater depth at a later stage. Enabling pupils to understand the importance of location in relation to the Equator and poles in determining weather and climate.</p> <p>Y2 – Geography. How does the geography of Kampong Ayer compare with where I live? This investigation will support children to make comparisons between their lives and those of people in a small diverse community in the country of Brunei in southeast Asia. Pupils will explore significant differences in terms of the infrastructure of the settlement together with its weather and climate and surrounding natural environment; the tropical rainforest biome.</p> <p>Y3/4 - Geography. Why are jungles so wet and deserts so dry? Pupils will develop an understanding of how climates vary, and are encouraged to reflect upon how climate has an important influence upon landscapes, plants, animals and human activity on Earth. Pupils will develop their understanding of how climate is the main factor determining the distribution of biomes.</p>
Causes of Climate Change	<p>Y5 – Local History study. Launceston railway. Examines the industrial revolution and how this huge increase in fossil fuel usage and population caused climate change. Looks at the health effects for the people that moved into cities and towns at the time as well as this being the historical beginning of large climate change. Also, the Beeching Report and an evaluation of how railways could reduce traffic on roads as what we could do to reduce our impact.</p> <p>Y3/4 - Geography. Why do so many people live in Megacities? Pupils will develop their understanding of settlements and urbanisation. They will explore some of the economic and social reasons why the population of cities increase. They also compare and contrast the benefits and problems that can arise in urban areas as a result of housing people at such high densities (e.g. pollution/ smog and congestion)</p> <p>Y3/4 - Geography. How and why is my local area changing? Pupils will build an understanding of changes that occur in environments as a consequence of natural events (quite often natural disasters of one kind or another) over which people have little or no control, and changes that people choose to make as a means of improving the quality of life. Pupils will be encouraged to reflect on some of the consequences of environmental change and to consider who or what might benefit from such changes and who in turn might be affected negatively by them.</p>

Impacts of Climate Change	<p>Y3 Geography. How do volcanoes affect the lives of people on Hiemaey?</p> <p>Y3/4 Geography – Why do some earthquakes cause more damage than others? How people are impacted upon by earthquakes. Pupils will understand that climate change does not only affect air and oceans but also increased severity and regularity of earthquakes.</p> <p>Y5 Biology – Living things and their Habitats – Examines the life cycles of plants and animals includes a workshop at RHS Rosemoor. This links to biodiversity and increases pupils understanding of the impacts of climate change on individual species and food chains.</p> <p>Y5 English. The Banana Tree. Hurricanes in the Caribbean. Looks at the impact of increased extreme weather on people but also allows children to learn that some extreme weather is part of the Earth's natural cycle of weather.</p> <p>Y6 – Geography What is a river? Investigation of features and processes of rivers. Includes looking at how the physical geography interacts with the human geography and includes a local study of the river at Boscastle and how the 2004 flood impacted upon real people by changes in the usual weather patterns.</p> <p>Y6 – Geography. How is climate change affecting the world? This investigation focuses initially on the personal stories of real people around the world who are being impacted upon by changes in the usual weather patterns.</p> <p>Y6 Biology. Living things and their habitats. How animals adapt to their environment and their diet. Children learn the restrictions of environment and diet and how reliant on stable climate conditions many species and food chains are.</p>
What we can do	<p>Y1 – Geography. Why do we love being beside the sea so much? Pupils will begin to understand the inter-relationships of people with their environments at both local and global levels. English – Sally and the Limpet text. Reflecting upon key messages in the book to provide opportunities for pupils to think more broadly about seaside environments; potential human impact and how this can be managed more sustainably.</p> <p>Y3/4 - Geography. How can we live more sustainably? Pupils will develop an understanding of what sustainability entails and how they might approach applying those principles to their own lives. Pupils will progress gradually to reflect upon the concept of a <i>resource</i> and how these can be renewable and infinite or non-renewable and finite.</p> <p>Y5 – Geography. Why is Fairtrade fair? This enquiry enables pupils to understand what international trade entails – the manufacture, selling and buying of goods and services between countries through exports and imports – and the fact that trade has been operating for thousands of years. It also defines and adds to pupil's knowledge of carbon footprint and food miles.</p> <p>Y5 UK Parliament. Learning how the UK voting system works and how as individuals we have empowerment and responsibility to affect change in the UK. Includes visiting parliament and a workshop on voting and democracy.</p> <p>Y5 – Geography. What is The Sunshine State really like? Pupils will explore people-environment interaction to gain an understanding of the significance of climate, natural hazards, aerospace technology and the conservation of the environment and living things in the lives of residents.</p> <p>Y6 – English - Writing a balanced argument, examining electric transport and new housing and energy efficient construction.</p> <p>Y6 – Geography – A local study of land use, economic activity and natural resources including energy. A study of wind farms as sustainable energy and comparing to fossil fuels.</p>

What I can do	<p>YF – Understanding the world. Pupils will begin to understand how to care for the natural environment. R.E - Harvest and farming. Geography – Map work - pupils will begin to take notice of their environment. Looking after the world – pupils will explore the importance of recycling; why we recycle and its impact. Literacy - ‘George saves the world by lunchtime’ text.</p> <p>Y1 – Science. Materials. Pupils will describe properties of everyday materials. They will explore the differences between man-made and natural materials and will also be encouraged to think about single use products and the impact these have on the environment. Children will be encouraged to explore reducing waste, reusing products and recycling.</p> <p>Y1 – Science. The Great outdoors. Pupils will identify and describe a variety of plants and trees (and begin to understand the important role trees play in the environment and the air we breathe, they will also explore where their food comes from, growing their own and the cycle of seed – plant/ tree – fruit etc. (Year-long study of the pumpkin.)</p> <p>Y2 – Geography. What is the geography of where I live? To begin to understand geography as the interrelationship of people with the environments with which they interact at a variety of scales and locations. This will include challenges and opportunities that the human race faces today in terms of population, migration and climate change as well as potential new energy sources.</p> <p>Y6 Residential – Camp Kernow. Wide range of learning opportunities all designed around the themes of sustainability and climate.</p> <p>Y2 – Geography. Why does it matter where my food comes from? To enable pupils to investigate location and distribution, as well as beginning to understand economic activity and trade. Knowing where their food comes from and why it is important to know. Pupils will have opportunities to begin to understand and reflect upon, in basic terms, why locally sourced food and free-range production regimes are considered environmentally friendly and sustainable.</p> <p>Y2 – Science. Plants. Observation of seeds and bulbs and how they grow, exploring suitable temperatures and keeping plants healthy. Pupils will grow their own plants and explore the cycle of seed – plant/ tree – fruit etc.</p> <p>Y5 – Chemistry Properties and changes of materials. As part of this study children will learn that some changes are irreversible such as burning, what happens when something burns, biodegradability of materials and repurposing or recycling of products.</p> <p>Y6 English – The Hidden Forest by Jeannie Baker. Children research and produce a text about kelp forests. The book investigates how climate change is affecting the kelp forests and impacts upon biodiversity and fishing. It also looks at conservation and activist.</p> <p>Y6 – History and DT – Mend and make do during World War II and how this links to recycling in the modern world.</p>
Tipping points	<p>Y4 – Biology – Animals including humans. Examining food chains locally and particularly tipping points of losing key producers, predators or prey from the food chain.</p> <p>Y6 English – The Last Bear examining melting ice caps, habitat change and looks at a scientist who is monitoring the weather.</p>

All areas of focus are covered by UNICEF assemblies and SMSC through picture news. This highlights events locally or internationally with news or current events relating to global climate.