

# Biodiversity

Sum 22

Assembly Concepts	Diversity
Assembly Knowledge	<ol style="list-style-type: none"><li>1. Celebration of our natural world - What is biodiversity and why is it important?</li><li>2. Ecosystems and trophic cascade</li><li>3. Our local ecosystem - Our Living Coast</li><li>4. 30 days wild in June</li><li>5. Human impact on biodiversity</li><li>6. The school environment</li></ol>
Key concepts	What is biodiversity and what is its value? Ecosystems Life in our biosphere - living coast Impact of actions on biodiversity and ability of planet to adjust
Class/School action	<a href="https://www.rspb.org.uk/globalassets/downloads/documents/positions/education/top-tips-for-schools-to-engage-with-biodiversity.pdf">https://www.rspb.org.uk/globalassets/downloads/documents/positions/education/top-tips-for-schools-to-engage-with-biodiversity.pdf</a> On-going help with biodiversity areas – development of specific infant playground area Development of use of pond and forest garden – more planting School growing projects – plant trees Composting 30 days Wild June
Family Commitment/ Pledge	How can we encourage biodiversity at home – flats/houses –guides provided Challenge – learn the names of the trees in our neighbourhood Community celebration – Me and my plants. Photos + names of plants we love at home or on the way to school What can you find in a metre squared of grass? Competition – types of plants/insects 30 days wild

½ termly climate challenge for a specific year group	Design a more biodiverse school environment – Yr 6
Connection with nature	<p>Biodiversity areas development in school</p> <p>Downs and diversity – exploring on trip</p> <p>Plant a tree campaign</p> <p><a href="https://www.woodlandtrust.org.uk/blog/2020/03/nature-detectives/">https://www.woodlandtrust.org.uk/blog/2020/03/nature-detectives/</a></p> <p>Swift project</p> <p>Wildlife walk with picnic – whole school</p> <p>David Attenborough film spectacular</p>
Outdoor learning	More outdoor classroom - <a href="https://www.ltl.org.uk/free-resources/">https://www.ltl.org.uk/free-resources/</a>
Ethical purchasing/sustainable practice as a school	<p>Palm oil/local produce/commit to vegan lunch days</p> <p><a href="http://www.worldwiseschools.ie/downloads/Ethical-Purchasing-Guide.pdf">http://www.worldwiseschools.ie/downloads/Ethical-Purchasing-Guide.pdf</a></p>
Political Engagement	<p>Work with school lunch company – more vegan options</p> <p><a href="https://www.wwf.org.uk/updates/8-things-know-about-palm-oil">https://www.wwf.org.uk/updates/8-things-know-about-palm-oil</a></p> <p>Campaign against palm oil - letter writing MPs</p>
Connecting with local organisations	<p><u>Class Talks and Assemblies</u></p> <p>Brighton and hove food partnership</p> <p><a href="https://bhfood.org.uk/">https://bhfood.org.uk/</a></p> <p>Just one tree</p> <p><a href="https://www.justonetree.life/">https://www.justonetree.life/</a></p> <p>Forest schools</p> <p>RSPB</p> <p><a href="https://ww2.rspb.org.uk/groups/brighton">https://ww2.rspb.org.uk/groups/brighton</a></p> <p>Local wildlife Campaigners</p> <p>Permaculture trust</p> <p><a href="https://brightonpermaculture.org.uk/">https://brightonpermaculture.org.uk/</a></p> <p>Sussex Wildlife Trust</p> <p><a href="https://sussexwildlifetrust.org.uk/">https://sussexwildlifetrust.org.uk/</a></p> <p>Brighton Greenway</p> <p><a href="http://www.brightongreenway.uk/">http://www.brightongreenway.uk/</a></p> <p>Stringer</p> <p>Nature 2020</p> <p><a href="https://www.nature2020.org.uk/">https://www.nature2020.org.uk/</a></p>

	Community Orchard Whitehawk <a href="https://bhfood.org.uk/directory/racehill-community-orchard/">https://bhfood.org.uk/directory/racehill-community-orchard/</a>
Staff Behaviour	Environmental volunteering opportunities
Emotional Resilience/Learning Behaviours/Relationships	Celebration of diversity/beauty of nature – mindfulness and nature activities

## Resources

<https://www.youtube.com/watch?v=Eowlsxo4HnE> climate change explained animation

<https://www.youtube.com/watch?v=EyZ8RwCGMk0&t=174s> Living Coast intro

<https://www.youtube.com/watch?v=5NF82ZLH4KY> people and places of the Living Coast

[https://www.youtube.com/watch?v=tiVNk6\\_0GdY](https://www.youtube.com/watch?v=tiVNk6_0GdY) planet earth trailer

<https://www.youtube.com/watch?v=c8aFchFu8QM> planet earth 2 extended trailer

<https://www.youtube.com/watch?v=MbLbGuTugJ0> planet earth best bits

[https://www.youtube.com/watch?v=\\_38JDGnr0vA&t=112s](https://www.youtube.com/watch?v=_38JDGnr0vA&t=112s) blue planet trailer

[https://www.youtube.com/watch?v=dQGI6x9\\_550](https://www.youtube.com/watch?v=dQGI6x9_550) What is biodiversity?

<https://video.nationalgeographic.com/video/magazine/my-shot-minute/00000144-0a33-d3cb-a96c-7b3f425b0000> Photos of diverse animals

<https://www.rhs.org.uk/advice/wildlife-garden> making a wildlife garden video

<https://www.nhm.ac.uk/discover/seven-ways-to-create-a-wildlife-friendly-garden.html> guide for wildlife friendly garden including birdfeeder and hedgehog home

<https://www.nhm.ac.uk/discover/how-to-make-and-use-a-nature-journal-to-record-your-wildlife-obs.html> making a nature journal

<https://www.nhm.ac.uk/discover/how-to-go-rockpooling.html> how to go rockpooling

<https://www.nhm.ac.uk/discover/how-to-make-pitfall-trap-to-catch-insects.html> how to make a pitfall trap

<https://www.nhm.ac.uk/discover/video-archive.html> lots of videos on wildlife and wildlife activities

<https://www.youtube.com/watch?v=0Puv0Pss33M&t=181s> how to save the planet

[https://www.youtube.com/watch?v=lg9Tfc\\_hNsE](https://www.youtube.com/watch?v=lg9Tfc_hNsE) how to save our forests

<https://www.youtube.com/watch?v=sGp032ahjJE> how to save our jungles

<https://www.youtube.com/watch?v=0QUy5-eg-dU> how to save our frozen world

<https://georgiastrait.org/wp-content/uploads/2018/09/overfishing-infographic-by-aquaholics.jpg> overfishing numbers

<https://ourworldindata.org/mammals> data on species decline

Key Ideas	By the end of Year 2:	By the end of Year 4:	By the end of Year 6:
Scientific background	<ul style="list-style-type: none"><li>• Pupils understand that some human activity causes pollution in the air which is affecting the world's climate / making the world hotter</li><li>• Pupils understand the distinction between 'weather' and 'climate'</li><li>• Pupils know that the climate is always changing but is changing faster today than it has before</li></ul>	<ul style="list-style-type: none"><li>• Pupils understand that burning coal, oil and gas has an impact on the climate and have a basic understanding of the scientific processes involved</li><li>• Pupils are familiar with the terms '<b>atmosphere</b>', 'Climate Change' and 'greenhouse gas emissions'</li></ul>	<ul style="list-style-type: none"><li>• Pupils can clearly articulate the link between burning fossil fuels and climate change using appropriate scientific vocabulary</li><li>• Pupils can name key carbon sinks such as forests, peatlands, oceans, algal blooms, and healthy soil</li><li>• Pupils know what the Intergovernmental Panel on Climate Change is and can discuss some recent findings</li></ul>

<p>Key Ideas</p> <p>Urgency of need for climate action</p>	<ul style="list-style-type: none"> <li>Pupils know that trees help to cool the world down.</li> </ul> <p>By the end of Year 2:</p> <ul style="list-style-type: none"> <li>Pupils know that some impacts of our changing climate are happening now and others will happen in the future</li> </ul>	<ul style="list-style-type: none"> <li>Pupils know that some natural processes like trees growing, healthy soils and oceans take greenhouse gases out of the atmosphere.</li> </ul> <p>By the end of Year 4:</p> <ul style="list-style-type: none"> <li>Pupils can explain why many institutions have declared a 'Climate Emergency', and what this means (see below re impacts of Climate Change)</li> <li>Pupils know about some of the impacts that higher temperatures are having on people already.</li> </ul>	<p>By the end of Year 6:</p> <ul style="list-style-type: none"> <li>Pupils can give examples of institutions that have declared a 'climate emergency' at different scales and are aware of synonyms such as 'climate crisis'</li> <li>They are familiar with the concept of emissions reduction targets and can identify different targets and begin to connect these with current scientific estimates for degrees of warming</li> <li>Pupils understand that 2030 is a scientific estimate of a year by which global emissions must have peaked in order to give humanity a reasonable chance of controlling eventual warming levels, and that it is not a deadline for an end-of-the-world scenario</li> <li>Pupils know about current trends in total global climate emissions, i.e. whether they are rising, peaking or falling</li> <li>Pupils begin to understand what climate tipping points are and can connect these with the urgency to act</li> <li>Pupils are familiar with the findings of cost-benefit analyses comparing quicker and slower global responses.</li> </ul>
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<p>Key Ideas</p> <p>Impacts of climate change</p>	<p>By the end of Year 2:</p> <ul style="list-style-type: none"> <li>Pupils understand the impacts of our changing climate on some animals, plants and environments both in our locality and elsewhere</li> </ul>	<p>By the end of Year 4:</p> <ul style="list-style-type: none"> <li>Pupils can identify a range of impacts of past and / or present climate change on plants and animal species, including <b>extinctions</b>, and on environments locally and across the world</li> </ul>	<p>By the end of Year 6:</p> <ul style="list-style-type: none"> <li>Pupils understand how climate change is a factor in the current loss of biodiversity and can describe some future predictions in connection with this</li> <li>Pupils understand the impact of climate change on ecosystems locally and across the world, both in the present and a range of future scenarios</li> </ul>
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Key Ideas	By the end of Year 2:	By the end of Year 4:	By the end of Year 6:
Responses to climate change	<ul style="list-style-type: none"> <li>Pupils can name some actions which would have a positive impact on the climate and some ways in which we can stop having a negative impact</li> <li>Pupils can choose some actions they / their class / their school / their family could take to have a positive impact on the climate</li> <li>Pupils can describe at least one simple / familiar example of how a group of people are taking positive climate action together</li> <li>Pupils and describe some actions to increase biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>Pupils understand the importance of trees for the climate and can explain why protecting / replanting forests is important for the climate</li> <li>Pupils understand that leaders of governments make agreements with each other about climate action and can identify some of the content of these agreements</li> <li>Pupils can name different examples of how a group are taking climate action together and can talk about the outcomes.</li> </ul>	<ul style="list-style-type: none"> <li>Pupils begin to discuss what makes some strategies more effective than others</li> <li>Pupils can identify actions they can take personally and with a group of which they are part</li> <li>Pupils are familiar with actions that are being taken locally, nationally; and with key content of international agreements</li> <li>Pupils begin to form their own opinions on these responses</li> <li>Pupils can describe a range of examples of how a group have taken climate action together, both locally and across the world, and can talk about the outcomes</li> <li>Pupils can discuss what makes for effective climate action</li> </ul>

Key Ideas	By the end of Year 2:	By the end of Year 4:	By the end of Year 6:
Possible futures	<ul style="list-style-type: none"> <li>Pupils begin to understand that the future will be different depending on what we do now</li> </ul>	<ul style="list-style-type: none"> <li>Pupils can imagine different futures within their own likely lifetimes based on different levels of heating, including optimistic scenarios</li> <li>Pupils know that action or lack of it now will have an effect on these different futures</li> </ul>	<ul style="list-style-type: none"> <li>Pupils can outline different possible future scenarios - typically in 2100 - depending on levels of heating</li> <li>Pupils have an understanding of current scientific consensus on what these future scenarios may look like, including best-case scenarios</li> <li>Pupils begin to understand the lack of certainty in future predictions</li> <li>Students know that our scientific understanding is developing and being revised</li> <li>Pupils are familiar with the 12 permaculture principles</li> </ul>

Key Ideas	By the end of Year 2:	By the end of Year 4:	By the end of Year 6:
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Mindsets and viewpoints	<ul style="list-style-type: none"> <li>• Pupils are exposed to different viewpoints on the Earth, e.g. that of indigenous peoples</li> </ul>	<ul style="list-style-type: none"> <li>• Pupils have the opportunity to explore viewpoints on the climate crisis, including people of colour and / or people of the Global South expressing their view in their own words</li> </ul>	<ul style="list-style-type: none"> <li>• Pupils reflect on different views of the relationship of humans with the Earth (This might include a variety of different perspectives from around the world including some spiritual / faith perspectives)</li> </ul>
Feelings and behaviour	<ul style="list-style-type: none"> <li>• Pupils can talk about their own feelings about the earth, the natural world and the climate</li> </ul>	<ul style="list-style-type: none"> <li>• Pupils can talk about their feelings about the earth and the natural world, our changing climate and its impacts. They know that others have a range of different feelings, including anxiety and fear</li> <li>• Pupils begin to understand how some people can feel less anxious when they take action with other people</li> </ul>	<ul style="list-style-type: none"> <li>• Pupils begin to identify the viewpoints which have influenced their own mindset, and which influence society more widely in the UK. They are given opportunities to think critically about these.</li> <li>• Pupils can talk about their feelings about the climate crisis and about their own future</li> <li>• Pupils are familiar with a range of methods people use to cope with anxiety about climate change including by taking collective action</li> <li>• Pupils begin to understand that awareness of the problem does not always lead to action and begin to explore some of the reasons why</li> </ul>