

Teach KS4 (GCSE) Geography with the Nature Park

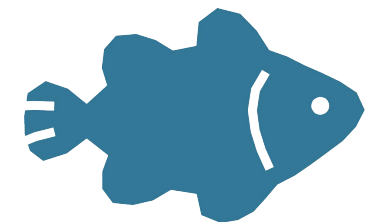
This guide helps you integrate resources from the National Education Nature Park into your school's existing Geography curriculum. The ready-made resources can be easily adapted to meet the needs of learners. They provide simple ways to incorporate nature-focussed activities into lessons at GCSE Level (key stage four).

Check out the KS3 teacher guidance for ideas tailored to the KS3 curriculum.

Topic	Link to online resource	Geographical theme	Possible learning ideas	DfE Geography GCSE subject content link
Climate Change	What do you want to know about climate change?	Causes and effects of climate change	<ul style="list-style-type: none"> independent or group-based research task learners could summarise the PowerPoint findings or create a revision tool from the poster 	16. Changing weather and climate – The causes, consequences of and responses to extreme weather conditions and natural weather hazards, recognising their changing distribution in time and space and drawing on an
	Climate change science poster		<ul style="list-style-type: none"> learners summarise the poster into a different format as an end of topic or revision task 	



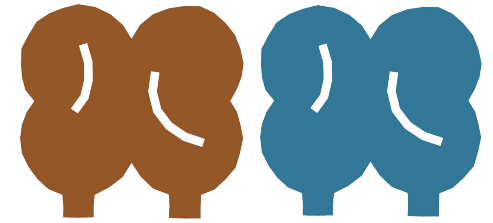
	Changing weather and climate		<ul style="list-style-type: none"> learners can select activities they are less confident with to help them revise 	<p>understanding of the global circulation of the atmosphere. The spatial and temporal characteristics, of climatic change and evidence for different causes, including human activity, from the beginning of the Quaternary period (2.6 million years ago) to the present day.</p>
	Climate change science poster		<ul style="list-style-type: none"> end of topic or revision task learners summarise the poster into a different format 	
	Climate change tiles		<ul style="list-style-type: none"> hot seating card sorts decision-making task 	
	Interpreting climate models		<ul style="list-style-type: none"> data presentation and analysis task when exploring climate change impacts read the guidance sheets for more learning ideas 	
	Sinking island		<ul style="list-style-type: none"> analyse data to help predict sea level rises, then discuss ways in which vulnerable populations can adapt to one of the effects of climate change 	





	Which regions have been affected the most by climate change?		<ul style="list-style-type: none"> learners use the information for a debate on the impacts and solutions to climate change 	
	39 ways to save the planet with Professor Vincent Gauci		<ul style="list-style-type: none"> group activity to revise or introduce key ideas relating to climate change 	
	Carbon cycle passport		<ul style="list-style-type: none"> helps explain the main causes of climate change 	
	Modelling future climate in the UK	Modelling climate projections	<ul style="list-style-type: none"> data analysis of climate predictions information for a decision-making exercise (DME) evidence to support ways to mitigate and/or adapt to the changing climate 	
	Investigate weather and microclimates	Explore the role global weather variations have on localised environments	<ul style="list-style-type: none"> conduct fieldwork, as part of a wider investigation, on the causes and effects of extreme weather 	
Ecosystems	Hidden nature challenge	Identifying the nature which makes up the	<ul style="list-style-type: none"> include within an ecosystem's fieldwork activity 	17. Global ecosystems and biodiversity – An overview of the distribution and





		school's unique ecosystem	<ul style="list-style-type: none"> extend the task so they become examples of food webs/chains on the school site 	<p>characteristics of large scale natural global ecosystems. For two selected ecosystems, draw out the interdependence of climate, soil, water, plants, animals and humans; the processes and interactions that operate within them at different scales; and issues related to biodiversity and to their sustainable use and management.</p>
	What is the anthropocene?	Understanding timelines and how these fit with the evolution of Earth's ecosystems	<ul style="list-style-type: none"> learners summarise the presentation's key points this adds detail to the planet's timeline 	
	Climate change and ecosystem recovery - podcast	Carbon measures in the Amazon Rainforest and methods to re-introduce native species to improve ecosystems	<ul style="list-style-type: none"> hot seating activity to explore the methods of managing ecosystems 	
	Biodiversity and habitat loss from satellite data	Analysing the changes in biodiversity of ecosystems	<ul style="list-style-type: none"> excellent opportunity for learners to identify the impacts of people on local and global ecosystems please look at the linked guidance within the resource for more ideas 	

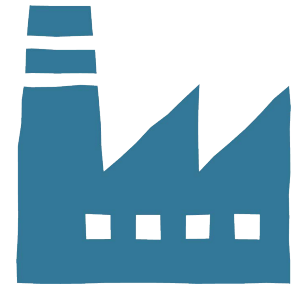
	Add a pond or rain garden.	Exploring food webs/chains within the localised environment	<ul style="list-style-type: none"> include within a fieldwork activity looking at food webs/chains on the school site develop the task to include recommendations on how to improve the local ecosystem 	
	Eco divo: species fact files	Food web/chains	<ul style="list-style-type: none"> learners identify species in creating food webs/chains 	
	Vertebrate declines and the sixth mass extinction	Impact of humans on ecosystems	<ul style="list-style-type: none"> analysis of the effects of habitat loss on global ecosystems see the teacher's guidance within the resource for more ideas 	
	The anthropocene: human impact on the environment	Impact of humans on ecosystems	<ul style="list-style-type: none"> analysis of the human impacts on ecosystems see the teacher's guidance within the resource for more ideas 	
Fieldwork skills	Shade mapping	Investigate how vegetation impacts the localised climate	<ul style="list-style-type: none"> learners use historic data, alongside collected data, to compare the impacts of ecosystems on the local environment. 	23. The following areas of knowledge, skills and understanding should be assessed through the fieldwork assessment, specifically: iii. processing and presenting fieldwork data in
	Ideas for improvement	Investigate biodiversity on the school site	<ul style="list-style-type: none"> include within a fieldwork practise day where learners conduct a series 	





	Find that plant!		of techniques to improve the biodiversity of their school site	<p>various ways including maps, graphs and diagrams</p> <p>iv. analysing and explaining data collected in the field using knowledge of relevant geographical case studies and theories</p> <p>v. drawing evidenced conclusions and summaries from fieldwork transcripts and data</p> <p>vi. reflecting critically on fieldwork data, methods used, conclusions drawn and knowledge gained</p>
	Investigate environmental quality	Geographical fieldwork to explore the quality of the local environment	<ul style="list-style-type: none"> include within a geographical investigation exploring the local environment 	
Geographical data skills	Using overlays	Cartographic skills	<ul style="list-style-type: none"> learners use various overlays to create a different perspective of the localised environment (for example, the topography of the landscape_ 	<p>Use of mathematics and statistics in geography, specifically: Cartographic skills</p> <ul style="list-style-type: none"> - use and understand gradient, contour and spot height on OS maps and other isoline maps (eg weather charts, ocean bathymetric charts) -interpret cross sections and transects
	Changing climate: climate stripes	Analysing the change in climate over time	<ul style="list-style-type: none"> data analysis task looking at how climate has changed over time use as a starter activity to introduce the causes of climate change 	





	3D model making	Interpretation of environment	<ul style="list-style-type: none"> creates an alternative way, of looking at a particular space, to help interpret surroundings. 	
Resource management	My2050	UK greenhouse gas emissions	<ul style="list-style-type: none"> use as a plenary or homework task where learners evaluate how the UK government is managing its greenhouse emissions other ideas are contained in the 'Teacher Guidance' of the resource 	18. Resources and their management – An overview of how humans use, modify and change ecosystems and environments in order to obtain food, energy and water resources. Detailed study of one of either food, energy or water, recognising the changing characteristics and distribution of demand and supply, past and present impacts of human intervention, and issues related to their sustainable use and management at a variety of scales.
	Carbon neutral	How to reduce carbon footprint	<ul style="list-style-type: none"> decision-making exercise (DME) where pupils work together to help reduce / eliminate the carbon footprint of a café for more ideas, please refer to the teacher guide within the resource 	
	Carbon footprint data	Role resources have in contributing to climate change.	<ul style="list-style-type: none"> data analysis task to explore the causes of climate change see the teacher's guidance within the resource for more ideas 	

