

Environmental and Sustainability Education

Term 1	Term 2	Term 3
Year 7		
Lesson: What is climate change, Actions Lesson: Carbon footprints	Lesson: Waste, Reduce, reuse, recycle Lesson: Fast Fashion	Lesson: Increasing Biodiversity in school and at home Lesson: Sustainable food
Assembly: Climate change and School actions	Assembly: Consumer choices (fairtrade)	Assembly: Transport
Curriculum Immersion – Changemaker day	Other:	Other:
Other subjects: Introduction to climate change (Geography) Seasonal fruit, Local v imported produce Reading and understanding food labels (Food Technology)	Other subjects: The impact of climate change on Antarctica (Geography) Understanding ingredients and issues around using them via pop tart disassembly (Food Technology) Physics Energy Module L01 – Energy Stores L02 – Temperature & Thermal Conduction L03 – Infrared Radiation L04 – The Greenhouse Effect L05 – Climate Change & Renewable Energy L06 – Green Homes & your Carbon Footprint	Other subjects: The living world – how animals adapt to different weather conditions and environments (Science) Weather hazards and the impact of climate change (Geography). In our unit ‘How do people respond to Evil and suffering?’ we look at Natural evil and natural disasters. We discuss the reasons for some of these disasters and question if humans are partly responsible for these due to their care or lack of for the environment (RPE)
Assessment: Assessment of pupils’ understanding is on-going, through contribution to learning in lessons, knowledge retrieval activities and lifestyle choices which support their knowledge. Yearly survey on sustainability education.		
Year 8		
Lesson: Futures thinking Lesson: Climate refugees	Lesson: Transport Lesson: Water	Lesson: Digital Carbon Footprint Lesson: Heating
Assembly: Climate Emergency and UK action	Assembly: Consumer choice (Sustainable Palm oil)	Assembly: Air pollution
Other:	Other:	Other:

<p>Other subjects: The impact of climate change on rates of erosion and sea level rising through the study of coasts (Geography) Environmental issues with regards to food. Potato farming in Egypt - raising questions about sustainability and consumer power through water use (Food Technology)</p>	<p>Other subjects: How the increase in population has an impact on climate change (Geography) Reactions of acids, e.g. acid rain (Science) Vegetable classification and use (Food Technology) In the unit 'Is the love of money the root of all evil' we look at wealth distribution across the globe and the causes of this including Fairtrade, fast fashion, sweat shops etc. (RPE)</p>	<p>Other subjects: Migration – climate migrants (Geography) Rivers and the impact of flooding due to climate change (Geography) Environmental chemistry – the earth's atmosphere, global warming, carbon cycle, recycling (Science) Food standards and meat production (Food Technology) Lesson on environmental impact of Industrial Revolution (History)</p>
<p>Assessment: Assessment of pupils' understanding is on-going, through contribution to learning in lessons, knowledge retrieval activities and lifestyle choices which support their knowledge. Yearly survey on sustainability education.</p>		
<p>Year 9</p>		
<p>Lesson: Sustainable Fishing Lesson: Solutions - 39 ways to the save the planet</p>	<p>Lesson: Bringing about change Lesson: Sustainability, SDGs, Doughnut economics</p>	<p>Lesson: Circular economy Lesson: Local issues, critical thinking</p>
<p>Assembly: Climate Emergency – sixth mass extinction</p>	<p>Assembly: Consumer choice (fast fashion)</p>	<p>Assembly: Waste</p>
<p>Other: Curriculum extension – envisioning the future day, Model United Nations day – Nature crisis</p>	<p>Other:</p>	<p>Other:</p>
<p>Other subjects: Fish sustainability and the Marine Stewardship Council (Food Technology) Digital Art: Design a poster to call for climate emergency awareness (Art)</p>	<p>Other subjects: Sustainable development goals (Geography) Energy and energy resources (renewable/non-renewable), cost calculations of electricity, photosynthesis, atmosphere and food chains (Science)</p>	<p>Other subjects: Tropical rain forests and the impact that climate change has on these (Geography) Materials – plastics in the ocean (Science) Cooking with leftovers (Food Technology) Development - fairtrade (Geography) Deforestation - palm oil (Geography) Tropical rainforests (Geography)</p>
<p>Assessment: Assessment of pupils' understanding is on-going, through contribution to learning in lessons, knowledge retrieval activities and lifestyle choices which support their knowledge. Yearly survey on sustainability education.</p>		
<p>Year 10</p>		

<p>Climate change is a key theme at GCSE level and arises in every topic.</p> <p>Renewable and non-renewable energy resources (Physics)</p> <p>Sustainability, environmental policy (Business Studies)</p> <p>Growing / buying ethically - Food miles, Organic/fairtrade/sustainable, Palm oil, Future of food (Food Technology)</p> <p>The ethics of computing and issues surrounding e-waste, the energy requirements of super computers and data centres, rare and precious metals for making computers and phones, and the positive effects on the climate of reduced travel owing to video conferencing, etc.</p> <p>Simulations of the climate are used to help learn about climate change (Computing)</p>	<p>Bioenergetics – photosynthesis (Biology)</p> <p>Year 10 Theory: AC1.4 Explain factors affecting the success of hospitality and catering providers. (Relevant) factors include:</p> <ul style="list-style-type: none"> • Economy • Environmental • Technology • Emerging and innovative cooking techniques • Trends • Political factors <p>(Food Technology)</p>	<p>GCSE resource management – water use (Geography).</p> <p>Global effects -carbon sinks, tropical rainforests, impacts of climate change, tipping points, carbon footprint, carbon offsetting, historical data, future scenarios (Geography)</p> <p>Energy – heating (Geography)</p> <p>Electric vehicles, public transport (Geography)</p> <p>Ecosystems</p> <p>Transport - hydrogen fuel cells. We have 2 mini hydrogen fuel cell cars to support learning.</p> <p>Chemical changes- electrolysis is studied in separate sciences.</p>
<p>Assessment:</p> <p>Assessment of pupils’ understanding is on-going, through contribution to learning in lessons, knowledge retrieval activities and lifestyle choices which support their knowledge.</p>		
<p>Year 11</p>		
<p>Science –</p> <p>Waves (Triple higher), absorption and reflection- the greenhouse effect (Physics)</p> <p>Insulation in homes (Physics)</p> <p>The chemistry of the atmosphere – gases, development of the atmosphere, greenhouse gases, human activity, climate change, pollution (Chemistry)</p> <p>Organic chemistry – hydrocarbons (coal, oil, etc.)</p> <p>The Earth’s resources – water treatment, wastewater, LCAs. (Chemistry)</p>	<p>Food Technology - Year 11 controlled assessment: AC2.2 Explain how dishes on a menu address environmental issues. This includes:</p> <p>Dishes</p> <ul style="list-style-type: none"> • Preparation and cooking methods • Ingredients used • Packaging <p>Environmental issues</p> <ul style="list-style-type: none"> • Conservation of energy and water • Reduce, reuse, recycle • Sustainability e.g. food miles, provenance <p>(Food Technology)</p>	<p>PSHE: Sustainable business / careers</p>

<p>Ecology - adaptations, ecosystems, food production, the effect of humans (Biology) The Earth's resources - water use, purification, how we recycle wastewater (Chemistry) Climate change in environmental chemistry - includes carbon sinks and how the carbon dioxide levels have changed over time, and trapping of carbon dioxide in rocks and the sea (Chemistry)</p>	<p>Environmental chemistry- life cycle assessments and carbon footprints. Students look at products and assess which has the most impact to the environment and which has the largest carbon footprint. Typical examples are cotton versus polyester or plastic bottles versus glass. (Chemistry) Year 11 Environmental chemistry topic. Pollution and waste - students study the makeup of air, what pollutants are and where they come from. This includes understanding technology like catalytic convertors in cars, etc.</p>	
<p>Assessment: Assessment of pupils' understanding is on-going, through contribution to learning in lessons, knowledge retrieval activities and lifestyle choices which support their knowledge.</p>		