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| **KEY IDEAS:** **Scientific Background** |
| **BY THE END OF** **YEAR 9:** | **Year group** | **Subject / Topic / theme**  | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **Resources** |
| * Students can explain the significance of the threat that climate change poses to life-forms on earth.

 |  |  |  |  |  |
| * Students consider current issues and future predictions for climate conflict
 |  |  |  |  |  |
| * Students can clearly explain that human actions such as burning fossil fuels are causing today’s climate change
 |  |  |  |  |  |
| * Students can describe processes that undermine or boost carbon sinks
 |  |  |  |  |  |
| * Students are aware that in the public arena there are alternative points of view and can begin to use scientific evidence to assess arguments for themselves
 |  |  |  |  |  |
| * Students know what the Intergovernmental Panel on Climate Change is and are aware of some of its recent findings and recommendations
 |  |  |  |  |  |
| * Students have explored vested interests and understand how these may shape arguments
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| **KEY IDEAS:** **Impacts of climate change**  |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students can explain current impacts of climate change on ecosystems locally and across the world, including habitat loss, food chain disruption and heat stress, and how these are contributing to the 6th mass extinction of species
 |  |  |  |  |  |
| * Students can identify different future scenarios for species and ecosystems, and connect these projections with different levels of additional heating
 |  |  |  |  |  |
| * Students can explain current impacts of climate change on humans locally and across the world
 |  |  |  |  |  |
| * Students can identify different future scenarios for the impact of climate change on humans, and connect these projections with different levels of heating
 |  |  |  |  |  |
| * Students consider current issues and future predictions for climate conflict
 |  |  |  |  |  |

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| **KEY IDEAS:** **Urgency of need for climate action** |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students can explain the urgency of the threat of climate change to human civilisation and all life on Earth
 |   |  |  |  |  |
| * They are aware that scientific data shows rapid change in the Earth’s climate
 |  |  |  |  |  |
| * They are aware that the global average temperature rise is accelerating
 |  |  |  |  |  |
| * Students know about current trends in global emissions and carbon sinks
 |  |  |  |  |  |
| * Students can give examples of climate feedback loops and explain the significance of climate tipping points
 |  |  |  |  |  |
| * Students can discuss their views about the risks associated with different global responses.
 |  |  |  |  |  |
| * Students are familiar with current targets and understand what computer models suggest the impacts will be of achieving or not achieving these targets
 |  |  |  |  |  |
| * Pupils are familiar with the findings of cost-benefit analyses comparing quicker and slower global responses.
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| **KEY IDEAS:** **Responses to Climate Change** |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students can explain the difference between mitigating and adapting to climate change
 |  |  |  |  |  |
| * Students understand that action on climate change is taking place worldwide at different levels: individual, collective, national and international (inc  local governments; businesses)~~.~~They can explain why action on all of these levels is important to address the climate crisis
 |  |  |  |  |  |
| * Students can express their opinion about the pros and cons of different strategies to address climate change e.g. renewable energy; protection / renewal of carbon sinks
 |  |  |  |  |  |
| * Students can describe practical things people can do individually or collectively to reduce greenhouse gas emissions
 |  |  |  |  |  |
| * Students appreciate that individuals reducing their footprint is an important part of collective efforts to slow climate change and that deep structural changes are also essential and can give examples
 |  |  |  |  |  |
| * Students can identify some elements that make actions on climate change successful
 |  |  |  |  |  |
| * Students can name the current international agreement on climate change and its key target
 |  |  |  |  |  |
| * Students understand arguments from different perspectives on how effective the agreement and its implementation are
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| **KEY IDEAS:** **Consumption and Climate Justice** |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students can describe the link between past industrial development and current climate change. They understand that society today is built on past emissions and that not everyone has benefited equally
 |  |  |  |  |  |
| * Students are able to make the link between patterns of human consumption (including their own)and climate change
 |  |  |  |  |  |  |
| * Students can explain what a Carbon Footprint is, including the footprint of an individual, organisation, city, region or nation
 |  |  |  |  |  |  |
| * Pupils compare the carbon footprints of people with a different lifestyle to them, including in other countries
 |  |  |  |  |  |  |
| * Students understand that generally, higher income countries have much higher greenhouse gas emissions (carbon footprints) than lower income countries.
 |  |  |  |  |  |  |
| * Students can explain how and why climate change affects some places and communities more than others e.g. people in the majority world
 |  |  |  |  |  |  |
| * Students can explain in simple terms the connection between climate change and migration
 |  |  |  |  |  |  |
| * Students can identify a wide variety of activities which cause climate change and also suggest low / zero-carbon alternatives
 |  |  |  |  |  |  |
| * Students understand the concept of ‘Climate Justice’ and can connect it to issues such as human rights and gender equality.
 |  |  |  |  |  |  |

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| **KEY IDEAS:** **Possible Futures** |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students understand that climate change will have an effect on the future of their lives and the lives of everyone in the world
 |  |  |  |  |  |
| * Students know there are different possible future scenarios which scientists have modelled, and can describe how different courses of action now would lead to different possible futures
 |  |  |  |  |  |
| * Students know that scientific understanding is developing and that there is lack of certainty in predictions
 |  |  |  |  |  |
| * Students know that what individuals and the global community as a whole do now will determine the probable future of life on Earth
 |  |  |  |  |  |
| * Students can give examples of (new) technologies that could help in the fight against climate change and can assess their advantages and limitations
 |  |  |  |  |  |  |  |
| * Students can draw on their knowledge of climate change to visualize and describe future scenarios, including a future they would like to see
 |  |  |  |  |  |  |  |

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| **KEY IDEAS:** **Mindsets and Viewpoints** |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students can describe how they see the relationship of humans with the natural world / planet
 |  |  |  |  |  |
| * Students can identify viewpoints which have influenced their own mindset, and which influence society more widely in the UK. They can give their own opinion about these.
 |  |  |  |  |  |
| * Students can describe a range of different perspectives on climate change (e.g. of indigenous communities; spiritual and faith perspectives; people of colour, from the majority world)
 |  |  |  |  |  |
| * Students can explain how different perspectives & viewpoints might lead to different behaviours
 |  |  |  |  |  |
| * Students can explain which perspectives on the natural world / planet they are personally drawn to and why.
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| **Key IDEAS:** **Feelings and Behaviours** |
| **BY THE END OF YEAR 9:** | **Year group** | **Subject / Topic / theme** | **Which lesson(s) will you cover this LO in?** | **How is the LO covered in the lesson(s)?** | **RESOURCES** |
| * Students can discuss their own and others’ feelings in connection with the climate crisis
 |  |  |  |  |  |
| * Students understand that anxiety is a normal response to understanding climate change
 |  |  |  |  |  |
| * Students can explain some methods people use to cope with anxiety about climate change (including by taking collective action)
 |  |  |  |  |  |
| * Students understand that when people are aware of a problem, they don’t always change their behaviour accordingly. They can give an example relating to climate change
 |  |  |  |  |  |

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| **SKILLS FOR A NET CARBON ZERO FUTURE** |
| * Food Growing
 | * Clothes Repair Skills
 | * Cycle Safety
 | * Cycle Maintenance
 | * Sustainable Cookery
 | * Household item repair skills
 | * Cutting down food waste
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| **INTRODUCING KEY TERMS** |
| **BY THE END OF YEAR 2:** | **BY THE END OF YEAR 4:** | **BY THE END OF YEAR 6:** | **BY THE END OF YEAR 9:** | **BY THE END OF YEAR 11:** |
| * Weather and Climate
 | * Climate change
* Atmosphere
* Greenhouse effect
* Greenhouse Gas emissions ./
* Carbon emissions
* Carbon dioxide
* Fossil fuels
* Renewable energy
 | * Carbon footprint
* Climate emergency
* Tipping points
* Intergovernmental Panel on Climate Change
* Ecosystems
* Climate justice
* Carbon sinks
* Biodiversity
* Permaculture
 | * Carbon drawdown
* Carbon capture and storage
* Climate debt / climate reparations
* Climate denial
* Computer model
* Climate feedback
* Mass extinction
 | * Confirmation bias
* Peer review
* Geoengineering
* Just transition
* Mitigation
* Adaptation
* Net Zero
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