

# Curriculum Learning Outcomes



unesco

## Greening Education Partnership

Getting every learner climate-ready



Our Scho  
Our Wo

# A curriculum based on connection and well-being



## Understanding the science

By the end of Reception	By the end of Year 1	By the end of Year 2	By the end of Year 4	By the end of Year 6
<ul style="list-style-type: none"> <li>I know how to care for the world, and I make sure I am looking after nature</li> <li>I make good choices to make sure I don't waste things</li> <li>I know lots of different types of weather</li> <li>I know the weather changes every day</li> <li>I know the weather changes in different seasons.</li> <li>I can tell you about patterns in the weather</li> <li>I know that when the weather changes plants and animals often change.</li> <li>I know the lifecycles of some animals and plants</li> <li>I know trees and plants need to be protected so they can provide homes for animals, make new soil and sometimes give us wood to use</li> </ul>	<ul style="list-style-type: none"> <li>I can tell you about pollution and its dangers</li> <li>I can tell you about some types of littering</li> <li>I know some of the causes of pollution</li> <li>I know that we need to take care of the things the world gives us and not use too much of them</li> <li>I know that plants and trees help us breathe and help humans and animals live though providing food and shelter</li> <li>I know that the climate is changing and the world is getting hotter</li> <li>I know some family activities make the world hotter, e.g. heating homes, making things, travelling</li> </ul>	<ul style="list-style-type: none"> <li>I can tell you that humans are also a species and a part of nature</li> <li>I can tell you about how nature takes care of humans for example through providing us with food and materials we need, through its beauty and through making us feel good</li> <li>I can tell you about things that are polluting the air making the world hotter – car travel, plane travel, factories</li> <li>I can tell you the difference between 'weather' and 'climate'</li> <li>I know the world's climate has always changed but it is changing faster today because of some of our choices and actions</li> <li>I know that trees help to cool the world down.</li> <li>I know that trees give O<sub>2</sub> and absorb CO<sub>2</sub> to help them grow. We need to look after forests and plant more trees to absorb the greater amount of CO<sub>2</sub> we are making.</li> <li>I can explain some basic elements of global warming e.g. some gases in the air act like a blanket or greenhouse keeping the air warm</li> <li>I know that the climate is always changing but is changing faster today than it has before</li> <li>I know we are using the earth's resources faster than nature can make them</li> </ul>	<ul style="list-style-type: none"> <li>I can explain how humans and nature are connected (e.g. how human impacts affect natural systems, how natural systems provide life's building blocks such as food ,air, water</li> <li>I can explain the concept of fossil fuels</li> <li>I can explain simply why we are burning fossil fuels and how burning coal, oil and gas (fossil fuels) has an impact on the climate.</li> <li>I can describe how seasonal temperatures may change from year to year but the average temperatures taken over the last 100 years are rising a lot</li> <li>I can explain global warming (used interchangeably with the term global heating)</li> <li>I can describe some of the effects of global warming such as heatwaves, drought, wildfires, melting glaciers and ice caps, sea level rises, increased severity and frequency of storms, hurricanes, and monsoons and flooding</li> <li>I can tell you about the main sources of greenhouse gases including CO<sub>2</sub> and methane</li> <li>I understand how using less energy can reduce emissions</li> <li>I understand what renewable energy is and can explain why it is important in reducing greenhouse gas emissions</li> <li>I understand the importance of trees for the climate and can explain why protecting / replanting forests is important for the climate</li> <li>I can suggest how the CO<sub>2</sub> level is increased by deforestation and the burning of wood</li> <li>I know that some natural processes found in healthy soils and oceans take greenhouse gases out of the atmosphere.</li> </ul>	<ul style="list-style-type: none"> <li>I can clearly explain the link between burning fossil fuels and climate change</li> <li>I can explain how some renewable forms of energy work</li> <li>I can describe the natural carbon cycle</li> <li>I can explain how the global temperature has changed in the past over long periods of time and that changes have become more rapid since industrialisation</li> <li>I can explain what carbon sinks are such as forests, peatlands, oceans, algal blooms, and healthy soil. I can explain why they are really important.</li> <li>I can describe effects of global warming including increased ocean temperature and acidity and death of coral reefs</li> <li>I understand the role of pollinators in food production</li> <li>I am beginning to understand what climate tipping points and positive feedback loops are.</li> <li>I can compare the advantages and disadvantages of different renewable energy technologies</li> <li>I can explain Net Zero and Carbon Neutral</li> <li>I know what the Intergovernmental Panel on Climate Change is and can discuss some recent findings</li> </ul>

# Impact of climate change

By the end of Reception	By the end of Year 1	By the end of Year 2	By the end of Year 4	By the end of Year 6
<ul style="list-style-type: none"> <li>I use the outdoor learning spaces in school to understand habitats for local wildlife and how to make healthy habitats.</li> <li>I can see how the weather affects habitats</li> </ul>	<ul style="list-style-type: none"> <li>I can tell you about some of the impacts of our changing climate on some animals, plants and different environments</li> <li>I know that some habitats are being damaged by the climate changing</li> </ul>	<ul style="list-style-type: none"> <li>I understand the impacts of our changing climate on some animals, plants and environments both in our school and city/town) and some places in the UK</li> <li>I know some of these changes are happening now and some will be happening in the future</li> <li>I understand the term biodiversity and why biodiversity is important for a strong healthy world</li> <li>I know about habitats disappearing and what we can do to help</li> <li>I know that eating less meat and buying meat locally will help the environment</li> <li>I know some of the impacts of our changing climate on people, both in our local area and elsewhere</li> <li>I know that we are part of a system where everyone and everything is linked together (self care, people care, earth care)</li> <li>I know that we are using the earth's resources faster than the world can make them – natural resources can regenerate but are not infinite</li> <li>I know that what we choose to eat can affect climate change</li> <li>I understand that we should be always trying to avoid waste.</li> <li>I know that permaculture makes food in a way which is good for the planet.</li> </ul>	<ul style="list-style-type: none"> <li>I can talk about different ecosystems locally and globally including towns and cities and marine environments</li> <li>I 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> <li>I can identify a range of observed impacts of our changing climate such as extreme weather on people locally and across the world</li> <li>I know that some people, animals and plants are affected by less fresh water being available due to climate change and extreme weather events</li> <li>I am beginning to use systems thinking to understand my impact on the environment</li> <li>I can tell you about the difference in carbon emissions between the different foods we eat</li> <li>I can trace the journey of a common item (like a fruit or a vegetable) from its origin to my plate showing each point of interconnectedness e.g. starting in nature, then harvest, then transport, then packaging then waste</li> <li>I can explain how some agriculture and deforestation has impacted climate change and severely reduced biodiversity</li> <li>I know that intensive fishing has had damaged marine ecosystems</li> <li>I know the impact of littering on the environment and the quality of life for humans and other animals, including pollution of oceans by plastics and oil leaks</li> <li>I understand and can explain the concept of earth overshoot day</li> </ul>	<ul style="list-style-type: none"> <li>I understand how climate change is one of the important causes of :               <ul style="list-style-type: none"> <li>the current loss of biodiversity e.g. the UK is one of the world's most nature depleted countries</li> <li>the damage to ecosystems e.g. coral reefs have declined by 50% since 1950</li> <li>the disruption in the lives of people in our local area, in the UK and across the world e.g. small island states and coastal areas will be affected by sea level rise especially during storms</li> </ul> </li> <li>I can identify human-caused irreversible changes in our natural environment that led to the extinction of species and can use this to encourage changes to human behaviour in the present</li> <li>I know that as climate change affects poorer areas of the world there will be increased human migration</li> <li>I can tell you about the differences in land use to produce meat, plants and cereals for our diets</li> <li>I always apply systems thinking and an understanding of interconnectedness to understand the consequences of my actions</li> <li>I understand the idea we are part of the Anthropocene period of time</li> <li>I understand how intensive farming can impact on biodiversity and climate change</li> </ul>

# Children as changemakers

By the end of Reception	By the end of Year 1	By the end of Year 2	By the end of Year 4	By the end of Year 6
<ul style="list-style-type: none"> <li>I understand our planet needs caring for.</li> <li>I understand all our school family and I are working together to care for the planet</li> <li>I know we are all a part of nature and can enjoy it for ourselves and with and for others</li> <li>I know there are actions we can all do daily to care for our planet. E.g. reuse everyday things, bring in my reusable water bottle, turn off lights, screens etc when not in use, look after wildlife and plants, don't waste food etc.</li> <li>I can talk about what I see in the local environment and how it makes me feel using a wide vocabulary (both with resources in the school learning environment and during outdoor trips to the park, to post a letter).</li> </ul>	<ul style="list-style-type: none"> <li>I can name some actions which would have a good impact on the climate e.g. walking to school, having a reusable water bottle, reusing and sharing clothes, not wasting things and some ways in which we have a bad impact</li> <li>I know that plants and trees are important in the fight against climate change</li> <li>I can help my family make good choices to look after the planet</li> </ul>	<ul style="list-style-type: none"> <li>I 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>I am beginning to use the 7rs regularly in my life (Refuse, Reuse, Repair, Reduce, Repurpose, Recycle, Recover)</li> <li>When we are looking at our different themes e.g. energy, food, biodiversity etc. I can choose some actions I/ my class / my school / my family could take to have a positive impact on the climate</li> <li>I can describe a few simple examples of how a group of people are taking positive climate action together in my community</li> <li>I regularly volunteer to help my school become better at caring for the planet and for others</li> <li>I can name a few changemakers and talk about what they do/have achieved</li> <li>I can talk confidently about my feelings about the earth and the natural world, our changing climate and its impacts. I know that others have a range of different feelings, including anxiety and fear but also most importantly how this is often based on strong empathy</li> <li>I know that together we can make a big difference</li> <li>I am beginning to understand that the future will be different depending on what we do now. I really understand I have the power to make change</li> </ul>	<ul style="list-style-type: none"> <li>I can identify lot of actions that I can take personally to reduce emissions / promote carbon sinks both in school and locally</li> <li>I can tell you about high polluting and high emission activities and low polluting and low emission activities</li> <li>I use the 7rs regularly in my life (Refuse, Reuse, Repair, Reduce, Repurpose, Recycle, Recover)</li> <li>I can explain the benefits of composting ( healthy plant growth, saving water, improving soil naturally)</li> <li>I can recommend actions my school and my family can do</li> <li>I understand that leaders of governments make agreements with each other about climate action and I can tell you about some of the content of these agreements</li> <li>I can name many different examples of how groups are taking climate action together and can talk about the outcomes.</li> <li>I enjoy volunteering to help my school and local area become better at caring for the planet and for others</li> <li>I can name lots of changemakers locally, nationally and internationally and can describe what they have achieved</li> <li>I understand how you can feel less anxious when you take action with other people</li> </ul>	<ul style="list-style-type: none"> <li>I am very familiar with a range of different climate action strategies including reducing consumption, using renewable energy, changing diet, rewilding and protecting/ restoring carbon sinks</li> <li>I can discuss what makes some strategies more effective than others</li> <li>I can give a simple explanation of the circular economy and how it can address waste and toxins</li> <li>I am familiar with actions that are being taken locally, nationally; and with the key content of international agreements</li> <li>I 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>I can identify effective actions I can take personally and with a group of which I am a part</li> <li>I can organise green activities and encourage others to volunteer</li> <li>I am familiar with a range of methods people use to cope with anxiety about climate change including by taking collective action</li> <li>I can explain the urgency of taking climate action( reduce climate emissions by 45% by 2030).</li> </ul>

# Climate Justice

By the end of Reception	By the end of Year 1	By the end of Year 2	By the end of Year 4	By the end of Year 6
<ul style="list-style-type: none"> <li>I can explain some similarities and differences between life and the climate in this country and life in other countries, drawing on knowledge from stories, non-fiction texts.</li> </ul>	<ul style="list-style-type: none"> <li>I know that some of the choices I and others make have a positive or a negative impact on the environment / climate</li> <li>I know some human activities that can help to tackle climate change e.g. walking to school, looking after resources, having a reusable water bottle, reusing and sharing clothes/books/paper and other resources/not wasting food</li> </ul>	<ul style="list-style-type: none"> <li>I know that many of the choices I and others make have a positive or a negative effect on the environment / climate</li> <li>I am beginning to be able to rank human activities e.g. how we travel to school, according to how much of an impact they have on the environment / climate</li> <li>I know that some countries find it harder to cope with the increase in extreme weather</li> <li>I know that some countries make more pollution than others, use more resources and cause more climate change gases</li> </ul>	<ul style="list-style-type: none"> <li>I can name a wide range of the things that we and others do that are responsible for climate change</li> <li>I am beginning to explore alternatives to these activities which are less harmful</li> <li>I understand that you can measure how much impact an activity has and know that different lifestyles have a greater or lesser impact</li> <li>I know what a carbon footprint is</li> <li>I can compare the carbon footprints of people with a different lifestyle to me, including people in other countries</li> <li>I now think about whether my actions are green or whether I could make them greener</li> <li>I know I am a changemaker and I try and make others become changemakers too</li> <li>I understand that choices can be complex and there is often not one simple answer</li> </ul>	<ul style="list-style-type: none"> <li>I understand what systems thinking is and how it can help me make the best choices</li> <li>I can clearly make the connection between climate change and things that I and others consume / activities I and others take part in</li> <li>I can tell you how climate change affects people from poorer countries significantly more than people from richer countries</li> <li>I know how countries which colonized much of the world in the past are generally wealthier, more powerful and have better technologies and resources to help them cope with or recover more quickly from climate events like heatwaves, flooding and extreme storms</li> <li>I understand that different lifestyles cause much lesser or greater carbon emissions</li> <li>I know that wealthy countries with lots of industry and polluting companies are probably more responsible for climate change emissions than poorer nations</li> <li>I can suggest a range of alternatives which might reduce greenhouse gas emissions both for myself and for others</li> <li>I can explain simply what a carbon footprint of an individual, a product, or an activity is</li> <li>I am beginning to understand the idea of greenwashing</li> <li>I understand different scenarios for how the world might be different in the future if we don't act now</li> <li>I know scientific understanding and predications are changing with new information</li> </ul>