# CLIMATE CURRICULUM FOR CLIMATE ACTION TOOLKIT

PLANNING AND RESOURCES FOR WHOLE SCHOOL IMPLEMENTATION







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## INTRODUCTION

This **Toolkit** has been developed as part of the 'Climate Curriculum for Climate Action' project. This was an Erasmus project collaborated on by four primary schools in four different countries: Moor Allerton Hall Primary School, Leeds, England; Our Lady Queen of the Apostles Primary School, Dublin, Ireland; Aplerbecker Grundshule, Dortmund, Germany and Akdeniz Yukselis, Antalya, Turkey. The schools were joined in the project by two non-governmental organisations: Leeds Development Education Centre, Leeds, England and SERGED, Antalya, Turkey.

The aim of the project was to collaborate on implementing a Climate Curriculum which would enable school pupils to gain the knowledge and understanding necessary for a world facing climate crisis, and also to equip them with the attitudes and skills to maintain their own mental and emotional wellbeing in the face of the crisis and also to make a positive contribution, both now within their own sphere of influence as children within their schools, families and communities, and also in their future lives.

The schools worked together on a set of learning outcomes across the 8 key areas of: Scientific Background; Urgency of the need for action; Impacts of climate change; Responses to climate change; Consumption & climate justice; Possible futures; Mindsets & viewpoints and Feelings & behaviours. These learning outcomes are designed to build pupils' knowledge, understanding and skills as they progress through school. They are outlined and explained in more detail in the **Framework** document which accompanies this **Toolkit**. Also accompanying this **Toolkit** is a **Guide** which provides case studies and further practical advice and examples from schools drawing on their experience of implementing the Climate Curriculum for Climate Action in their own contexts.





# Why is climate education so important?

Before going on to explain the content of this Toolkit, and how to use it, it's worth pausing to consider why climate education is so vital in our schools right now.

If you're reading this Toolkit, then the chances are that you agree with the 93% of Europeans who see Climate Change as a serious problem (Eurobarometer on Climate Change 2019) and the 90% of teachers in the UK polled in 2020 who believe that climate education should be more widely taught across the curriculum in schools (teachthefuture.uk/teacher-research). And perhaps also with the 70% who said that they felt that they did not have adequate training and resources to engage pupils with the issues. But why is it so important to introduce climate education within our schools?

The first and most obvious answer is that the issue is of vital importance for children. If education is preparation for life, then an education which does not engage meaningfully with climate issues is in danger of preparing children for a world that will soon no longer exist. For children in primary school now, the majority of their lives will be dominated by the effects of the climate crisis in one way or another and, to a greater or lesser extent, many of them are already aware of its relevance to their world and their lives.

Education which adequately addresses the climate crisis is vital, not only in preparing children for their future life, but also in caring for their emotional wellbeing now. There is research evidencing the 'eco-anxiety' experienced by children and young people who feel negatively about the future.

Schools, who have a duty of care to their pupils, need to provide education which supports children experiencing distress about climate change and which promotes more positive feelings, such as hope in action. Rather than perpetuating the idea that adults aren't doing anything about it, schools can model to children that important adults in their life do understand the urgency, do respond to children's concerns, do care about the future of the planet and are able to take positive action, alongside children.

Whilst protecting young children from doom-laden predictions, there is a key role for schools in educating them about the importance and urgency of the climate crisis. Schools are in a unique position in our societies to introduce key information about the urgency of the need for action on the climate. They can support children in getting their wider families thinking about these issues, which in turn can promote both behaviour change and positive support for pro-climate policies.

Education is key to enabling students to take informed action and make choices that support a just and sustainable world; that's why education is a climate change solution and you are part of the solution!

"Distress about climate change is associated with young people perceiving that they have no future, that humanity is doomed, and that governments are failing to respond adequately, and with feelings of betrayal and abandonment by governments and adults. Climate change and government inaction are chronic stressors that could have considerable, long-lasting, and incremental negative implications for the mental health of children and young people."

Hickman et al in The Lancet Vol 5 Issue 12

December 2021

### Content of the Toolkit:

As discussed above, this **Toolkit** is designed to be used in conjunction with the **Framework** and **Guide** which were also produced as a part of this collaborative project.

The **Toolkit** reflects the experience of the schools involved in the Climate Curriculum for Climate Action project in their different national contexts and the teaching and learning methods and practices that emerged. Once the schools had discussed the learning outcomes for the climate curriculum (for full details of these learning outcomes, see the accompanying Framework) they went on to map the climate learning outcomes across their existing curriculum.

In considering how to implement the Climate Curriculum learning outcomes in school, we recognised how busy teachers are and how much they already have to fit into their different national curricula. Therefore it was really important to us that the Climate Curriculum for Climate Action would not add extra pressure to already overloaded teachers and overcrowded timetables. Instead, the aim was to integrate the climate curriculum learning outcomes within existing planning and schemes of work to fit national curricula and the schools' own local contexts. So the **Toolkit** contains planning for lessons and links to resources from each of the participating schools. This planning reflects the way these schools have delivered the Climate Curriculum learning outcomes - there are obviously many other resources available, and many different methods that you may find more suitable for your own context as every school is different. The tables below just give a practical starting point, showing plans and resources that worked for the partner schools who collaborated in this project.

#### Week of walking to school (children + staff)

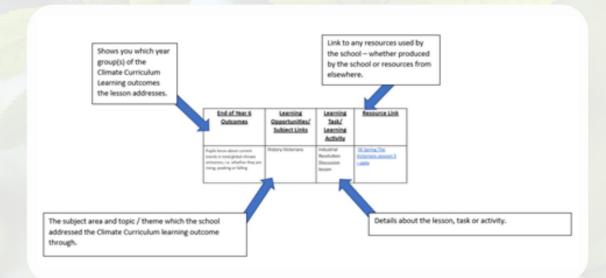




# How to use this Toolkit:

In order to make sense of the planning and resources below, we recommend that you first familiarise yourself with the **Framework**, as that will give context and background to the Climate Curriculum learning outcomes. Once you are familiar with the 8 key areas covered by the climate curriculum, and how they progress throughout the school years, we offer this **Toolkit** for you to use in whatever way you find most useful.

The information about each school's planning and resources is laid out in tables, see example below:



How you use the Toolkit depends on what you want it for: each school in the project had a different approach. As a starting point, you may prefer to find a subject area, topic or theme from the second column which one of the schools has delivered climate education as part of, which is also a subject, topic or theme taught in your own school. You may prefer to start by looking through the approach that a school from your own country took as that might be more appropriate for you. You may choose to browse by age / year group or by which area of the Climate Curriculum you want to focus on. You may simply want to browse the resources to find ones that might be relevant for your context.

The planning and resource links are offered below as they were used by the schools in the project. You may find something that a project school has used in one year group useful in different year group, or you may want to adapt and use a resource in a different way to how the school used it in the project. The toolkit resources are simply offered as a record of the experience of the four schools involved.

For further information such as case studies detailing the experience of the project schools in practice, information about how the schools implemented peer learning techniques to deepen and strengthen climate learning across the whole school, and general advice arising from the schools' experience, see the project **Guide**.



# How to approach integrating teaching climate change in your curriculum across school / into your teaching

The learning outcomes in the Climate Curriculum for Climate Action were designed to be integrated across the whole school. An advantage of a whole school approach is that, by the time the pupils reach the later years, teachers do not have to 'start from scratch' because the knowledge, understanding, attitudes and skills of the pupils build progressively.

The experience of the four participating schools was that there were varied approaches to integrating the learning outcomes, all with different advantages and each suitable for different learning outcomes, topics and contexts.

Delivering Climate learning outcomes through other subjects and topics: The main approach that the schools took in the project was to deliver the Climate Curriculum learning outcomes through other subjects and topics. For example, as shown in the example above from Moor Allerton Hall Primary School, Leeds, the learning outcome about trends in greenhouse gas emissions was explores as part of a history lesson on the Industrial Revolution.In this example, the climate learning outcome was just a part of one lesson, but in other cases, one whole lesson as part of a wider scheme of work focused on a climate learning outcome.

'Schools found that the advantages of this approach were that the climate learning was not seen as an 'added extra,' but as part of the bread and butter' of the school curriculum, integrated into the existing school curriculum and part of everyday learning. This approach builds pupils' knowledge, understanding and skills progressively so that year on year as they progressed through school they were able to tackle more complex or advanced learning outcomes. Teachers began to see the fruits of this through the years of the project, realising that they didn't have to 'start from scratch' when introducing concepts to the children as ground work had already been laid in previous years. We envisage that as the climate curriculum implementation continues in school for further years, the benefits of this will improve further. In addition, the fact that the climate learning outcomes are planned into the school curriculum means that climate learning does not depend on a particular staff member but is revisited yearly as part of the standard topics and subjects, making it sustainable.

Delivering climate learning outcomes through standalone lessons or schemes of work:

In addition to delivering the climate learning outcomes through the existing curriculum, the schools also found that there were some learning outcomes which were easier to deliver through standalone lessons, a focused scheme of work or on off-timetable themed days (in the project often linked to school strike days connected with the Fridays for Future movement). For more details on how the schools delivered some of these, see the project Guide.

Schools found that the advantages of this approach were that there were some learning outcomes which were harder to fit in to existing topics and subjects and needed a more focused approach in order to do them justice. Themed days were also more flexible and schools could respond to current issues (for example learning about COP talks at the time when they were in the news). Again, see the project Guide for further information about how schools implemented this aspect of climate learning.



#### Planning and lesson links based on Climate Curriculum learning outcomes

Moor Allerton Hall Primary School, Leeds, England: Upper Key Stage 2 (ages 9-11)

#### 1. Scientific Background

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can clearly articulate the link between burning fossil fuels and (increases in rates of) climate change	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx
using appropriate scientific vocabulary	Peer Education	Carbon Sink Poster	Y3 6 Peer Education TheCarbonCycle.pptx
	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx
Pupils can name key carbon sinks such as	KS2 Assembly	Sharing Assembly	Y3 4 5 6 KS2 Assembly carbon sinks.pptx
forests, peatlands, oceans, algal blooms, and healthy soil (and how they affect the climate crisis)	Peer Education	Carbon Sink Poster	Y3 6 Peer Education TheCarbonCycle.pptx
Pupils know what the Intergovernmental Panel on Climate Change is and can discuss some recent findings	Climate Day	Mind Map	Y6 Climate day.pptm
Pupils can discuss recent scientific findings in relation to climate change	Climate Day	COP 26 Discussion	Y6 Climate day.pptm

#### 2. Urgency of Need for Climate Change

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	<u>Resource Link</u>
They are familiar with the concept of emissions reduction targets (and how realistic these targets are and to what	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx
extent they can be achieved) and can identify different targets and begin to connect these with current scientific estimates for degrees of warming	Climate Day	Mind Map and Protest Banner - Chant creation	Y6 Climate day.pptm
Pupils understand that 2030 is a scientific estimate of a year by which global emissions must have peaked in	Climate Day	Mind Map and Protest Banner - Chant creation	Y6 Climate day.pptm
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	Peer Education	Carbon Sinks to help the issue	Y3 6 Peer Education TheCarbonCycle.pptx
Pupils know about current trends in total	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx
global climate emissions, i.e. whether they are rising, peaking or falling	Victorians Topic Reading	Topic Reading	Y6 Topic reading - industrial revolution effect on global warming.docx
Pupils begin to understand what climate tipping points are and can connect these with the urgency to act (for both small and large scale issues - link to climate injustice))	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx

#### 3. Impacts of Climate Action

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils understand how climate change is a factor in the current loss of biodiversity and can describe some future predictions in connection with this	Geography  Y6 Climate Day - Running out of time	Comparing Landuse in different areas	Y5 land use and climate change.pptx  Y6 Climate Day Running out of time.pptx
Pupils understand (can describe) the impact of climate change on ecosystems locally and across the world (loss of biodiversity), both in the present and a range of future scenarios	Assembly	Looking at a range of ecosystems	Y3 4 5 6 KS2 Assembly carbon sinks.pptx  Y6 Climate Day Running out of time.pptx
Pupils can identify a range of impacts of our changing climate on people in the past and present, in their local area, in the UK, and also across the world	Recycling	What affect does waste have on our climate?  How does this affect people in other parts of the world?	Y1 and Y4 Task 1 Sorting Cards.pdf Y1 and Y4 Peer Education.pptx
	KS2 Assembly  Climate Afternoon -	Paper Waste  Children learn about carbon footprints	Y3 4 5 6 KS2 Assembly paper waste.pptx  Y5 Running out of time - climate activity.pptx
Pupils can identify current impacts, and a range of predicted future impacts depending on levels of heating, including human migration. (changes in agricultural patterns)	Running Out of Time	and attempt to calculate their own  What will happen if these are not reduced?	15 Naming out of time - chinate activity.pptx

#### 4. Responses to Climate Change

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils are familiar with a range of different climate action strategies including reducing consumption, using renewable energy and protecting/restoring carbon sinks	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx
Pupils begin to discuss what makes some strategies more effective than others	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx
Pupils can identify actions they can take	Climate Day	Video Clip soundbites	Y6 Climate day.pptm
personally and with a group of which	Climate Day	Protest Banner Making	Y6 Climate day.pptm
they are part (locally or globally?	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx
Pupils are familiar with actions that are being taken locally, nationally; and with key content of international agreements	Climate Day	Mind Map	Y6 Climate day.pptm
Pupils can describe a range of examples	Climate Day	COP 26 and Soundbites task	Y6 Climate day.pptm
of how a group have taken climate action together, both locally and across the world, and can talk about the outcomes (	History/Reading	Mary Walton text and questions.	Y6 Reading Lesson 2 PP.pptx Y6 Mary Walton - text.docx
Pupils can discuss what makes for effective climate action	History/Reading	Mary Walton text and questions.	Y6 Reading Lesson 2 PP.pptx Y6 Mary Walton - text.docx

#### **5 Consumption and Climate Justice**

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils understand that some individuals and countries are more responsible than	History/Reading	Mary Walton text and questions.	Y6 Reading Lesson 2 PP.pptx
others for greenhouse gas emissions to date	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx
	Y5 Earth Day	Caclulating carbon footprints	Y5 Earth day activity afternoon.pptx
Pupils can clearly make the connection between climate change and things that	History/Reading	Mary Walton text and questions.	Y6 Reading Lesson 2 PP.pptx
they and others consume / activities they and others participate in	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx
and others participate in	Y5 Earth Day	Maths links- Can we calculate our classes carbon footprint?	Y5 Earth day activity afternoon.pptx
Pupils understand that different lifestyles cause much lesser or greater carbon emissions	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx Y5 Earth day activity afternoon.pptx
Pupils can name suggest a range of alternatives which might reduce greenhouse gas emissions	History	Poster creation for carbon footprint and reducing pollution	Y6 Leeds & Clapham - Lesson 6 PP.pptx  Y5 Earth day activity afternoon.pptx
Pupils can explain how some countries are more responsible than others for producing greenhouse gas emissions and compare this with where the climate crisis has the	Victorians Topic Reading	Topic Reading	Y6 Reading Lesson 1 PP.pptx
	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx
most severe impacts. They can use this information to begin to develop their own	History/Reading	Mary Walton text and questions.	Y6 Reading Lesson 2 PP.pptx

ideas about rights and responsibilities now		
and in the future.		

#### **6 Possible Futures**

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can outline different possible future scenarios - typically in 2100 - depending on levels of heating	Victorians Topic Reading	Topic Reading	Y6 Reading Lesson 1 PP.pptx
Pupils have an understanding of current scientific consensus on what these future scenarios may look like, including best-case scenarios	Year 5 Maths - Data analysis	Look at trends of energy consumption.  What would future forecasts be?	Y5 statistics and climate change.pptx
Pupils begin to understand the lack of certainty in future predictions	Year 5 Maths - Data analysis	Look at trends of energy consumption.  What would future forecasts be?  Can these be changed?	Y5 statistics and climate change.pptx
Pupils know that our scientific understanding is developing and being revised	Science	Study of famous scientists in science week. Discussion about how some findings were revolutionary at the time but have since been revised	

#### **7 Mindsets and Viewpoints**

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils reflect on and <u>compare</u> 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)	History Victorians	Industrial Revolution Discussion lesson	Y6 Spring The Victorians session 5 –.pptx  Y5 Running out of time - climate activity.pptx
Pupils can identify viewpoints which have influenced their own mindset		Class Discussions -	Y5 Running out of time - climate activity.pptx
Pupils can think critically about and begin to challenge the accepted mindset in society	PSHCE	Debate Activity- Persuasive Arguments Should we buy the latest fashions? Why should we all have electric cars?	

#### **8 Feeling and Behaviours**

End of Year 6 Outcomes	Learning	Learning Task/ Learning	Resource Link
	Opportunities/	<u>Activity</u>	
	Subject Links		
People begin to compare the effectiveness of different strategies to help cope with feelings around climate change	PSHCE	Discuss how Climate change makes us feel.  How do we best deal with these feelings?  Children to use journals and a bank of mindfulness activities to combat	Y4 CC PSHCE Physical Health and Wellbeing.pptx
	PSHCE	Feelings Questionnaire	Y3 4 5 PSHCE KS2 What do you feel about Climate Change Class Questionnaire.docx
Pupils begin to understand that awareness of the problem does not always lead to action and begin to explore some of the reasons why.	Ongoing work	Students have discussions throughout the year about climate learning.  Discussions after pre and post assessments	Y4 CC PSHCE Physical Health and Wellbeing.pptx

#### Moor Allerton Hall Primary School, Leeds, England: Lower Key Stage 2 (ages 7 - 9)

#### 1. Scientific Background

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils understand that burning (finite fossil fuel resources such as) coal, oil and gas has an impact on the climate and have a basic understanding of the scientific processes involved	Science	To learn the three fossil fuels, how they are formed and how they are used by humans. To explore the impacts of fossil fuels and currently alternatives available.	Y4 CC Science Fossil Fuels.pptx
Pupils can define the terms 'atmosphere', 'Climate Change' and 'greenhouse gas emissions'	Science	Watch the clip. Talk with your partner and write ideas down, answering the questions – What does climate change mean to you?	https://www.youtube.com/watch?v=Sv7OHfpIRfU
	Science	Whole Class Strike Action Day	Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx
		<ol> <li>Task: create a leaflet to explain:</li> <li>Where the polar ice caps are</li> <li>How climate change is changing the ice</li> <li>How melting ice will affect coastal towns round the world</li> <li>How ice melting affects animals</li> <li>What we can do to help</li> </ol>	How climate change affects us all  https://www.wwf.org.uk/sites/default/files/2019- 12/WWF KS2 Lesson1 Presentation.pdf  check out the animals affected by climate change  https://www.wwf.org.uk/learn/effects-of/climate-change-  The difference between climate and weather link-  https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/z7dkhbk
Pupils can identify natural processes that remove carbon dioxide from the atmosphere.	Assembly	Carbon Sink Assembly	Y3 4 5 6 KS2 Assembly carbon sinks.pptx

Pupils know that some natural processes	Assembly	Carbon Sinks Assembly	Y3 4 5 6 KS2 Assembly carbon sinks.pptx
like trees growing, healthy soils and oceans take greenhouse gases out of the	Topic	Trees and Rivers	Y3 Rivers Session 3 Climate Change.pptx
atmosphere			

#### 2. Urgency of Need for Climate Change

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils understand the term climate emergency & climate crisis.	Climate Curriculum Day	Discussion and Videos	Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx  Y 3 4 MAHPS COP 27 Climate Day Climate Running Out Of Time.pptx
Pupils can give examples of institutions that have declared a 'climate emergency' at different scales and are	PSHCE	PSHCE topic – Identity, society, and equality: Democracy	Y 3 4 MAHPS COP 27 Climate Day Climate Running Out Of Time.pptx
aware of synonyms such as 'climate crisis'	Science Week	Task 3 Design a pollution reducing invention.	Y4 Science Week PPT 3 sessions - Session 1 Air Pollution Session 3 CleanUp.pptx
Pupils know about some of the impacts that higher temperatures are having on people already. (and give examples of the effect in different habitats eg turtles, coral reefs)	Science topic – Human impact (What is the human impact on the earth?)  Link to Volcanoes and Earthquakes topic.	Take your sheet of the volcano. Draw and label the hazards of an eruption.	Volcanoes and Earthquakes- Geography – extreme earth Task is on slides.  Y4 CC Lesson 3 Geography Extreme Earth.pptx
	Science lessons- human impact- Topic- Human impact on the Earth and climate change	Lesson objective- To know and understand causes and consequences of flooding.  Task- card sorting. Organise the cards  1. What caused the floods?  2. What are the effects of the floods?	Y3 lesson 8 Flooding.pptx

<ul><li>3. What is being done to stop floods happening again?</li><li>Challenge</li></ul>	
Can you put that cards in time order?	
DT - Create a structure which would survive a flood	Y3 Construction Session 3 - Beat the Flood.pptx

#### 3. Impacts of Climate Action

End of Year 4 Outcomes	<u>Learning</u>	Learning Task/ Learning	Resource Link
	Opportunities/	<u>Activity</u>	
	Subject Links		
Pupils can identify a range of impacts of past and / or present climate change on plants and animal species, including (biodiversity loss-use of term in year four) extinctions, and on environments locally and across the world	Climate Action Strike Day Science Geography - Extreme Weather	Research activity- Look at the impact and causes of :  1. Extreme global weathers 2. Global sea level changes 3. Food shortages 4. Animal extinction	Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx
	Science	Plastic Pollution with insulators	Y4 Electricity Lesson 4 Plastic Pollution.pptx
Pupils can identify a range of observed impacts of our changing climate on people locally and across the world the world	Geography- Rivers	Task: create an information leaflet to explain:  What is flooding?  Where has flooding happened in Britain recently?  How do we try to protect towns from flooding?  How does climate change link to flooding?	Y3 lesson 8 Flooding.pptx

Climate Strike Day- topic link extreme earth.	<ol> <li>Key focus questions-</li> <li>What is the difference between weather and climate?</li> <li>Why is ice so important to the world?</li> <li>Which animals and plants have been affected by climate change?</li> <li>What does extinction mean?</li> <li>How does global warming cause extinction of different species?</li> <li>How does this make us feel?</li> <li>What can we do about our worries?</li> </ol>	Planning sheet- first climate day planning sheet Year 4.  why do we need ice:  Why Do We Need Ice?  How climate change affects us all  https://www.wwf.org.uk/sites/default/files/2019-
Recycling	Y1 Y4 Peer Education about The 3Rs	https://www.wwr.org.uk/sites/default/files/2019- 12/WWF_KS2_Lesson1_Presentation.pdf  check out the animals affected by climate change https://www.wwf.org.uk/learn/effects-of/climate-change-
Assembly	- discussion  Paper Waste and Carbon Sinks	Y3 4 5 6 KS2 Assembly paper waste.pptx
		Y3 4 5 6 KS2 Paper Waste Assembly script.docx Y3 4 5 6 KS2 Assembly carbon sinks.pptx
Maths	Line Graphs Increases in temperatures line graphs	Y4 Maths Temperature Line Graphs - Climate Change Link.docx
History	Romans - Impact on Environment	Y4 Session 11 Impact of Rome-The Roman Environment.ppt  Y4 Session 11 Secondary sources and debate.docx
Geography and Earth day	Food Miles	Y3 Y4 Earth Day Food Miles Package ANSWERS.docx Y3 Y4 Earth Day Food Miles Package Examples.docx

		Y3 Y4 Earth Day Earth Colouring Sheet.pdf
		Y3 Y4 Earth Day 2023.pptx
History	50 Years of the School and Fashion	Y3 Y4 1970s Fashion and Climate Change.pptx

#### **4. Responses to Climate Change**

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils understand how using less energy can reduce emissions	Science- Electricity	Discussion about turning off light switches.	Y4 Electricity Lesson 5 Turning off lights.pptx
	Y4 Science	Greenhouse Gases slides	Y4 CC Science Greenhouse Gases.pptx
	Y4	Fossil Fuels	Y4 CC Science Fossil Fuels.pptx
Pupils understand what renewable energy is and can explain why it is	Geography	Iceland Case Study with Renewable Energy	Y4 Lesson 4 Iceland Notesheets.docx Y4 Lesson 4 Geography Extreme Earth.pptx
important in reducing greenhouse gas emissions	Science	Electricity and Renewable Energy	Y4 Electricity Lesson 3 Renewable Energy.pptx
	Geography	Volcanic Benefits For and Against Cards	Y4 lesson 6 Geography Extreme Earth.pptx  Y4 Lesson 6 Volcanoes For and Against Cards.pdf
Pupils understand the importance of trees for the climate and can explain	Maths - Area	Activity-	Y4 Climate lesson with comparing area.docx Y4 Climate lesson with comparing area.pptx

why protecting (scientific background?) / replanting forests is important for the climate		Child to pretend they are scientists, sent around the world to study the rates of deforestation.  They will need to compare data to work out where deforestation is the most severe.	
	Deforestation	Reading Comprehension linked to the Amazon Rainforest	Y3 Week 3 The Amazon.pptx  Y3 Reading The Amazon.pptx
	Assembly	Carbon Sinks	Y3 4 5 6 KS2 Assembly carbon sinks.pptx
Pupils can identify actions that they can take personally to reduce emissions / promote carbon sinks	PSHCE	Work through pp slides- discussion using images.  Task- What actions can we take? Think of some actions or ideas that you may be able to do to aid or help the current climate change crisis. Think about different levels or scale of your help.	Y4 CC PSHCE Physical Health and Wellbeing.pptx
	Science topic – Where does all the food go?  Focus- Environment unit on managing waste.	Activity- to create a group presentation.  With your group – create a script and use drawings/diagrams to present information about one of the following GREENHOUSE GAS sections (see PP slides).	Y4 CC Science Fossil Fuels.pptx
	Assembly	Carbon Sinks	Y3 4 5 6 KS2 Assembly carbon sinks.pptx
Pupils can identify actions that can be taken at the level of their school and locality	Climate Strike Day	Task- Children to create a leaf promise. This will include actions they can do to help the climate. Stick each leaf promise to create a tree.	Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx
	Science	Alternative Energy- Electricity topic	Y4 Electricity Lesson 2 Alternative Energy.pptx

Pupils understand that leaders of governments make agreements with each other about climate action and can identify some of the content of these agreements	Climate Strike Day  COP 26 and COP 27		Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx  Y3 4 MAHPS COP 27 Climate Day Climate Running Out Of Time.pptx  Y5 Running out of time - climate activity.pptx  Y6 Climate Day Running out of time.pptx
Pupils can name different examples of how a group are taking climate action together and can talk about the outcomes.	Geography	Rivers - Flooding	Y3 lesson 8 Flooding.pptx  Y3 Lesson 9 Cards Flooding River Aire.pdf  https://drive.google.com/file/d/1 NVwkMKGpyAnli6X amFJ3zRfqXe6xdMO/view?usp=drive_link
	Climate Days	COP 26 and COP 27	Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx  Y3 4 MAHPS COP 27 Climate Day Climate Running Out Of Time.pptx

#### **5 Consumption and Climate**

End of Year 4 Outcomes	<u>Learning</u>	Learning Task/ Learning	Resource Link
	Opportunities/ Subject Links	<u>Activity</u>	
Pupils can name some of the things that they and others do that are responsible for climate change at a personal, community, country and global level	History- Ancient times- Egyptian and Stone Age	PP slide- Humans relationship with earth now compared to Stone Age times.  Task- Have a look at some of the everyday choices humans living in today's century have to make that will affect our climate.  Look at each scenario and choose an action.	Y3 Humans relationship with earth now compared to Stone Age timespptx

	Tourism/History	Comparison between present and past communities	Y3 Tourism- link to Stone Age topic.pptx
	History	Stone Age Community Discussion Role task	Y3 Week 7 Lesson 4 Reading.pptx
	Maths - Area	Activity-	Y4 Climate lesson with comparing area.docx
	Geography Deforestation	Children to pretend they are scientists, sent around the world to study the rates of deforestation.  They will need to compare data to work out where deforestation is the most severe.	Y4 Climate lesson with comparing area.pptx
Pupils understand that the choices they make may affect other living things including people in other parts of the	History	Stone Age Effects	Y3 Humans relationship with earth now compared to Stone Age timespptx
world.	History	Roman Effects	Y4 Session 11 Impact of Rome-The Roman Environment.ppt  Y4 Session 11 Secondary sources and debate.docx
	Geography	Iceland Case Study	Y4 Lesson 4 Iceland Notesheets.docx Y4 Lesson 4 Geography Extreme Earth.pptx
	Climate Discussion Cards	Discussion	Y4 Climate Discussion-Cards-Ages-7-9.pdf
	Science Week	Ocean Plastic Pollution	Y4 Science Week PPT 3 sessions - Session 1 Air Pollution Session 3 CleanUp.pptx
Pupils begin to explore alternatives to	Science	Electricity Alternatives	Y4 Electricity Lesson 2 Alternative Energy.pptx
these activities which are less harmful (e.g the circular economy, alternatives to fast fashion etc)	Science	Electricity Renewables	Y4 Electricity Lesson 3 Renewable Energy.pptx
	Topic	Renewable - Iceland Case Study	Y4 Lesson 4 Geography Extreme Earth.pptx
	Climate Day	Power Saving Promises	Y3 4 Curriculum Strike Day for Climate Emergency PPT.pptx

			Y3 4 MAHPS COP 27 Climate Day Climate Running Out Of Time.pptx
	Science	GG and Carbon Footprint	Y4 CC Science Greenhouse Gases.pptx
	PSHCE	Thoughts and Feelings	Y4 CC PSHCE Physical Health and Wellbeing.pptx
	Peer Education	The 3Rs	Y1 and Y4 Peer Education.pptx
			Y1 and Y4 Task 1 Sorting Cards.pdf
	Earth Day	Food Miles	Y3 Y4 Earth Day 2023.pptx
Pupils can evaluate and begin to rank	Earth Day	Food Miles	Y3 Y4 Earth Day 2023.pptx
human activities according to carbon emissions produced They begin to understand that different lifestyles have a greater or lesser impact	Discussion Cards	Climate Discussion	Y4 Climate Discussion-Cards-Ages-7-9.pdf
Pupils can explain simply what a carbon	Science	GG and Carbon Footprint	Y4 CC Science Greenhouse Gases.pptx
footprint of an individual, a product, or an activity is	Earth Day	Food Miles	Y3 Y4 Earth Day 2023.pptx

#### **6 Possible Futures**

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils can imagine/predict/explore different futures within their own likely lifetimes based on different levels of heating, including optimistic scenarios	Science	Discussion around the question "Where do you get Energy?" - Fossil Fuels	Y4 CC Science Fossil Fuels.pptx
	Science Week	Invention to clean up Ocean plastic pollution	Y4 Science Week PPT 3 sessions - Session 1 Air Pollution Session 3 CleanUp.pptx
	Maths	Line Graphs - possible futures based on previous data	Y4 Maths Temperature Line Graphs - Climate Change Link.docx
	Topic	Y3 Robotics	Y3 Rise of the Robots Project book.pdf  https://drive.google.com/file/d/1JspFjA1gkY4SWBnRL yV6IGW2W9iOfAV2/view?usp=drive_link  Y3 Rise of the Robots Session 1 Green Ideas.pptx  Y3 Rise of the Robots Session 2 Design Ideas.pptx  Y3 Rise of the Robots Session 6 Schematic Draw.pptx  Y3 Rise of the Robots Session 7 Instructions.pptx  Y3 Rise of the Robots Session 8 Robot Building.pptx  Y3 Rise of the Robots Session 9 Animation.pptx  Y3 Rise of the Robots Session 10 Design Simulation.pptx  Y3 Rise of the Robots Session 11 Design Code.pptx  Y3 Rise of the Robots Session 12 Evaluation.pptx

Pupils know that action or lack of it now will have an effect on these different	Science Week	Invention to clean up Ocean plastic pollution	Y4 Science Week PPT 3 sessions - Session 1 Air Pollution Session 3 CleanUp.pptx
futures.	Maths	Comparing Areas - lack of change will not stop this	Y4 Climate lesson with comparing area.docx  Y4 Climate lesson with comparing area.pptx
	Science	Fossil Fuels	Y4 CC Science Fossil Fuels.pptx

#### **7 Mindsets and Viewpoints**

<b>End of Year 4 Outcomes</b>	<u>Learning</u>	Learning Task/ Learning	Resource Link
	Opportunities/	<u>Activity</u>	
	Subject Links		
Children listen to diverse voices on the climate crisis including people of colour	PSHCE	Thoughts and Feelings	Y4 CC PSHCE Physical Health and Wellbeing.pptx
and people of the global south	History	How have the viewpoints of people	Y3 Humans relationship with earth now compared to
		changed? - Stone Age	Stone Age timespptx
	Climate Afternoon	Discussion over the affect over many	Y4 Climate Afternoon Responses to Climate Change
		groups.	24.5.22.pptx

#### **8 Feeling and Behaviours**

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils can talk about their feelings about the earth and the natural world, our changing climate and its impacts. They	Questionnaire	Class Questionnaire	Y3 4 5 PSHCE KS2 What do you feel about Climate Change Class Questionnaire.docx
know that others have a range of different feelings, including fear and hope	PSHCE	Thoughts and Feelings	Y4 CC PSHCE Physical Health and Wellbeing.pptx
	Journals	Class Journals led by class teacher	
Pupils are familiar with a range of	PSHCE	Thoughts and Feelings	Y4 CC PSHCE Physical Health and Wellbeing.pptx
strategies people use to cope with fear about climate change including by	Mindfulness	Earth Day Colouring	Y3 Y4 Earth Day Mindfulness Colouring.pdf
taking collective action	Journals	Complete Journals around topics as well as class discussion.	



#### Moor Allerton Hall Primary School, Leeds, England: Key Stage 1 (ages 5 - 7)

#### 1. Scientific Background

End of Year 2 Outcomes	Learning Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Pupils understand that some human activity causes pollution in the air which is affecting the world's climate / making the world hotter quickly	Topic and DT in Year 1	Looking at transport and effect on climate (Context was linking to wheels and axels in DT)	https://docs.google.com/presentation/d/1Jh-mFGV0_Ey_V-yNrznl78rRcz1oM7DG/edit#slide=id.p1
	Year 2 South America topic	Children to discuss deforestation and the impact this is having on our climate.  Activity: Design your own – Save the Amazon Rainforest Poster.	https://docs.google.com/presentation/d/14bVVAbMT 50llfQuJGoqS50GLpEb7i0Bk/edit#slide=id.p1
	Whole School Climate Day		https://docs.google.com/presentation/d/1MpIr7Qlh9 Qc0zlKcLG0hgTrnV0vYQZ81/edit#slide=id.p1
			https://docs.google.com/presentation/d/12Y0IMYdtP NnlsDWgN3o6qPetuntaS9sB/edit#slide=id.p1
Pupils understand the distinction between 'weather' and 'climate'	Year 1 - Science Our changing seasons Year 1 Geography Weather topic	Daily weather diary to be kept for a week. Children have an outdoor	https://docs.google.com/presentation/d/1siLJvL- EIWj9bRCu1QGdYFM8P4u_WGpe/edit#slide=id.p1
	Year 2 Weather and Climate	Children look at the effects of extreme weather	https://docs.google.com/presentation/d/1MtTzh5- zghdf_AfgjKdVAcOSsIZS95Nc/edit#slide=id.p3
	Whole School Strike Day	Whole School Planning	https://docs.google.com/document/d/1kAv9qYMQr8 B9PYb2vhYebhByQTm48c/edit#heading=h.gjdgxs
Pupils know that the climate is always changing but is changing faster today than it has before (and this is due to	Year 2 - Climate Day	Children to have discussion-based lesson regarding the reasons for why our climate is changing faster today.	https://docs.google.com/presentation/d/1MpIr7Qlh9 Qc0zIKcLG0hgTrnV0vYQZ81/edit#slide=id.p1
actions of humans)		Activity- Climate change vocabulary activity recapping knowledge and vocab surrounding this LO.	

	Year 2 Weather and	Children look at the effects of	https://docs.google.com/presentation/d/1MtTzh5-
	Climate	extreme weather	zghdf_AfgjKdVAcOSsIZS95Nc/edit#slide=id.p3
Pupils know that trees help to cool	Science topic - Plants	Learning about the importance of	https://drive.google.com/drive/folders/1eXbyH0OKqd
the world down (by helping to remove	Our Changing Seasons	trees- what they are used for and	<u>1jpz_DPQn4Su97fta-j1f5?usp=drive_link</u>
dangerous greenhouse gases).		the effect of deforestation	
Pupils know that trees absorb	Science - Plants Topic	Children consider why trees are cut	https://docs.google.com/presentation/d/1yajNSUwC
carbon dioxide		down and how we can help	<pre>QPqKrfk3kYROdiiYm1YCVItC/edit#slide=id.p1</pre>
	Year 2 South America	Children to discuss deforestation and the	https://docs.google.com/presentation/d/14bVVAbMT
	Topic	impact this is having on our climate. <b>Activity:</b> Design your own – Save the	50llfQuJGoqS50GLpEb7i0Bk/edit#slide=id.p1
	-	Activity: Design your own – Save the Amazon Rainforest Poster.	
		7	

#### 2. Urgency of Need for Climate Action

<b>End of Year 2 Outcomes</b>	<u>Learning</u>	Learning Task/ Learning	Resource Link
	Opportunities/	<u>Activity</u>	
	Subject Links		
Pupils know that some impacts of our changing climate are happening now and others will happen in the future	Year 2 - Climate Day	Challenge Cards for discussion	https://docs.google.com/presentation/d/1V9Dflvr-frsC78ztSxCpXnv4iWlLcWS5/edit#slide=id.p1
			https://drive.google.com/drive/folders/18cST9DAERV 9wK08QzcCohqpxdv_JEjgK
	Year 2 – English Classroom	Reading Comprehension on Greta Thunberg	https://drive.google.com/drive/folders/18cST9DAERV 9wK08QzcCohqpxdv JEjgK
	Y1 - Story	The Runaway Iceberg story. How is climate change affecting animals now and in the future	https://drive.google.com/drive/folders/18cST9DAERV 9wK08QzcCohqpxdv JEjgK
	Y1 Science	Trees and Deforestation	https://docs.google.com/presentation/d/1xuZa_qYyLa_ ZgulznW-fbOY57oBPbeUIU/edit#slide=id.p1

#### 3. Impacts of Climate Action

End of Year 2 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils understand the impacts of our changing climate on some animals, plants and environments both in our locality and elsewhere	Geography	Y2 Arctic Topic Revisit their understanding of how the warming up of the earth is happening using the video penguins and polar bears. Activity- discussion based on video.	https://vimeo.com/140200000
	Science - Looking at Animals	Y1 PSHCE Caring for the world. Impact of climate change - What can we do to help?	https://docs.google.com/presentation/d/1LfwDzoYISA ge_hGT5PPDfbUUvDvvcdRi/edit#slide=id.p1
	Science Looking at Animals	Turtle Lesson – Turtle facts and art activities	https://drive.google.com/drive/folders/1TP0JUJIcIkYZ Z4yifH2Gt3ocZIKQnZ17?usp=drive_link https://docs.google.com/presentation/d/1LfwDzoYISA ge_hGT5PPDfbUUvDvvcdRi/edit#slide=id.p1
	Year 2 – Strike Day	Lesson 2 – Orangutans	https://drive.google.com/drive/folders/1PdR1jMnO-bpl-5nyruOLFVf0qO_m9o8c?usp=drive_link
	Year 1 Story	The Runaway Iceberg – Discussion of story	https://docs.google.com/presentation/d/1yEJyHW_O-fm0p1Mwih2xswilsLlD2GPw/edit#slide=id.p1
	Year 1 –Climate Vocab, Impact and Response	Lesson as part of Climate Day- Impact of climate change on orangutans	https://docs.google.com/presentation/d/1YgSae7EIIU RTJuio0o2hMJuUWYThUX4Y/edit#slide=id.p1
Pupils know some of the impacts of our changing climate on people, both in our locality and elsewhere	Year 1 – Science Plants	Trees and Deforestation	https://docs.google.com/presentation/d/1irWcuAfXP 8mCmdVysGEFZcp1gKyEbWqz/edit#slide=id.p3

Year 2 Geography	Impactt of climate change on people- farming	https://docs.google.com/presentation/d/113VH3itiRU mCJvNR9ek7X3bAFO2ZKd-T/edit#slide=id.p6
Whole School Climate Day	Activities and Planning	https://docs.google.com/document/d/1w4E9hgFgKQ6 35PBdBXLbpsiJA8fTiDar/edit#heading=h.gjdgxs
		https://docs.google.com/document/d/1UnjQar- QCsSK07gzfespU6f6qijLpBJc/edit

#### **4. Responses to Climate Change**

<b>End of Year 2 Outcomes</b>	<u>Learning</u>	Learning Task/ Learning	Resource Link
	Opportunities/	<u>Activity</u>	
	Subject Links		
Pupils can name some actions	Year 2	What is a windfarm? Geography	https://docs.google.com/document/d/1BRS-
which would have a positive impact on the climate and some ways in		locating windfarms in the UK	ofXZP_CVHzEjwUJUqdPkLXIDt1Nl/edit#heading=h.gjd
which we can stop having a	V 2 III I		gxs
negative impact	Year 2 - History	Leeds then and now. Making	https://docs.google.com/presentation/d/1-
		Comparisons	d9GVHr2e1BhpN8nwfvhiqVI2-197a -/edit#slide=id.p1
	Year 1 Science	Recycling. Why do it? What is the	https://docs.google.com/presentation/d/1intZYtlwtLy
		impact	HnaZgnEZLV2dD75NjnpeT/edit#slide=id.p1
Don't a see also see a see	Year 1	English letter writing. Write to parents and list things they can do at home	https://docs.google.com/document/d/1CGKt9CO-
Pupils can choose some actions they / their class / their school / their family		4OVys4G2tDQ9gnPC04JYuA/edit	
could take to have a positive impact			
on the climate			https://drive.google.com/drive/folders/1jCw7ArZ3pbh
		How can I help? Children list ideas of	SOgHJN4z85w8SmMSfMLOH
		things they can do	30gHJN4283W83HHVI3HVILOH
		tilligs they can do	https://drive.google.com/drive/folders/1jCw7ArZ3pbh
			SOgHJN4z85w8SmMSfMLOH
			30gHJN4283W83HHVI3HVILOH
	Year 1	Recycling Lessons – What can we	https://docs.google.com/presentation/d/1intZYtlwtLyHnaZgnE
	i cui i	recycle? Why is this kind to the planet	ZLV2dD75NjnpeT/edit#slide=id.p1

		Peer Education Lesson with Y4 – Card sort and make a poster	https://docs.google.com/presentation/d/1KG8SpJR- jK910Pp6ID0kPcRRiMgjexe0/edit#slide=id.p1
		Card sort and make a poster	[K910F poiDOKF CKKIIVIB]EXEO/Edit#Silde=id.p1
			https://drive.google.com/drive/folders/1jCw7ArZ3pbh
			SOgHJN4z85w8SmMSfMLOH
	Year 1 PSHCE , Science	Link to plant topic and Community	https://docs.google.com/presentation/d/18sdw2Elj1Z
Pupils can describe at least one		Planting	QVRh-8hEy9RdtHC55vqqIp/edit#slide=id.p1
simple / familiar example of how a group of people are taking positive			
climate action together			

#### **5 Consumption and Climate Justice**

End of Year 2 Outcomes	<u>Learning</u> <u>Opportunities/</u> Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils understand that human activities impact the natural environment	Y2 RE	Discussion and sharing activity	https://docs.google.com/presentation/d/1xLW-iz2eeNRYX62KD0y73DqLjmHrvxsE/edit#slide=id.p1 https://docs.google.com/presentation/d/1QMxVVJHc
	Y1Plants	Trees and Deforestation	ZXTLb4kytck33UnaPf9YMniU/edit#slide=id.p1  https://docs.google.com/presentation/d/1S2fe- G3wVVCu91fw3Z7GmAFS8f-DzdNg/edit#slide=id.p1
	Y1 Recycling	What is the impact of waste on our planet? How can we sort waste? Litter picking and rubbish sort	https://docs.google.com/presentation/d/12JGpJLmQ-CI7DI u5NISQvX9g5RltSMD/edit#slide=id.p1  https://docs.google.com/presentation/d/1fGgJJuELE9 v_mCvEQDeg3LY5hlcBQT-H/edit#slide=id.p1
		Year 1 and 4- Peer Swap. Year 4 Teach Y1s as 'the experts' Litter sort and design a poster	https://drive.google.com/drive/folders/1BeD_VryDFCi jV7yZr_WGQ15Wnyb3_AnB

Pupils begin to group human activities they are familiar with (e.g. how they travel to school, how they use energy, what they buy) according to whether they have a big impact on the environment / climate.	Computing Maths - pictograms	Children talk about how they travel to school. Take a class survey and tally the results. Chn to input the data on an ipad as a pictogram Link to climate in the plenary-  Data Collection Sheet.  What did we find out about our class?	https://docs.google.com/presentation/d/1kX0TUNTb- 4-Up1DD9UQoZMaU9 OksEzL/edit#slide=id.p1  https://docs.google.com/presentation/d/1KEIBxPrSsF ngkBVFFuxVzKhDfGK0PTA0/edit#slide=id.p5  https://drive.google.com/drive/folders/1BeD_VryDFCi jV7yZr_WGQ15Wnyb3_AnB
Pupils understand that the choices they make may affect other living things including people in other parts of the world.			

#### **6 Possible Futures**

<b>End of Year 2 Outcomes</b>	Learning	Learning Task/ Learning	Resource Link
	Opportunities/	<u>Activity</u>	
	Subject Links		
Pupils begin to understand that the	Whole School Climate	Discussion on action we can take for	https://drive.google.com/drive/folders/1G7gdBa2cbV
future will be different depending on what we do or do not do now.	Day	a greener future.	hE-3wGQUmBF_MIbPGput4L?usp=drive_link
what we do of do not do now.		Children to write a promise to share	
		at home	https://docs.google.com/document/d/1k1ob8aLWaT
			D00FALKx4qaQXpOd3X8xme/edit#heading=h.gjdgxs



Leaf pledges from pupuls at Moor Allerton Hall, these were displayed on a giant cardboard tree.





#### **7 Mindsets and Viewpoints**

End of Year 2	Learning Opportunities/	Learning Task/ Learning	Resource Link
<u>Outcomes</u>	Subject Links	<u>Activity</u>	
Pupils are exposed to different viewpoints on the Earth, e.g. that of indigenous peoples.			
Pupils explore stories from all different cultures about humans and our relationship with our earth		Year 1 - Listen to story at story time. Discussion	Zonia's Rain Forest by Juana Martinez Nei Link to story on youtube Zonia's Rain Forest by Juana Martinez Neil

#### **8 Feeling and Behaviours**

End of Year 2	Learning Opportunities/	Learning Task/ Learning	Resource Link
<u>Outcomes</u>	Subject Links	<u>Activity</u>	
Pupils can talk about their own feelings about the earth, the natural world and the climate.	English	Children are given opportunities for	
	!	discussion throughout the year.	
		Pre and post assessments can be	
		incorporated here	
	Year 1 Story	Discussion How does it make you	https://docs.google.com/presentation/d/150MfEvV3p
		feel?	<pre>LEVmfJAD7_5NmZ2RVlhsvvp/edit#slide=id.p1</pre>
	Year 2 -	Discussion of Penguins and Polar	https://vimeo.com/140200000
		Bears	

#### Our Lady Queen of the Apostles Primary School, Dublin, Ireland (all classes age 5 – 11)

### 1: Scientific Background

Lesson	Learning outcome	Taught	Resources/links etc
1. Research air pollutants e.g. cars/factories etc. Reflect on their own actions. Key Questions 2.	Pupils understand that some human activity causes pollution in the air which is affecting the world's climate / making the world hotter	1st Class	EXPLORE WITH ME 1- p58  EXPLORE WITH ME 1-p71
EXPLORE WITH ME 1st Class-'The Water Cycle' 3.  EXPLORE WITH ME 1st Class-'Air Pollution' Key questions	Pupils understand the distinction between	2nd Class	Weather Acrostic
4. Using the calender in the classroom/describing the weather in Irish each day Poetry 5.	'weather' and 'climate'		EXPLORE WITH ME pg82
EXPLORE WITH ME 2nd Class-'Weather in Ireland and other places'			
6. Discussions of natural disasters Videos of news	Pupils know that the climate is always changing but is changing faster today than it has before	1st & 2nd Class	Media clippings as disasters arise
7. Explorations of local woodlands 8. The role of trees in the carbon cycle. 9. Experiment to see which tree leaf produces the most	Pupils know that trees help to cool the world down.	1st Class	http://www.justforests.org/just-forests- education-resources Ireland`s forests.docx
oxygen. Place different leaves in water and see which leaf produces the most bubbles			

Lesson	Learning Outcome	Classes taught and number of students	Resources/link/textbook
10. What is climate change?	Pupils can articulate the main causes and effects of climate change	Fourth Class June 2022 and June 2023	Explore with me: Pgs 195 -197
	Pupils can evaluate what groups are doing locally		062 fossilfuelsairpollutiongreenhouse redesign.pdf  https://www.youtube.com/watch?v=SDRxfuEvqGg
11. Who's doing something about the climate crisis?	to mitigate climate change	Whole school: 540 pupils	
12. Why do we have to reduce our emissions?	Pupils can understand the importance of international targets for reduction of greenhouse gas emissions	Fourth Class: 62 pupils	Maths investigations on rate of Arctic ice melting  Maths of the Arctic.docx
13. Tipping Points	Pupils can identify where these tipping points are and the outcomes	6 <sup>th</sup> class (64 pupils)	https://www.youtube.com/watch?v=uynhvHZUOOo https://kids.frontiersin.org/articles/10.3389/frym.2021.703610
14.	Pupils can relate some of the effects of the		KIRIBATI AND CLIMATE CHANGE.docx
The Industrial Revolution	Industrial Revolution on global warming	6th Class (64 pupils)	Powerpoint
	Pupils can understand the importance of peatlands, oceans, forests as carbon sinks and the importance of maintaining these	2rd Class / 60 pupils)	The industrial Revolution.pptx
15. Carbon sinks 1		3rd Class ( 60 pupils) Autumn 2022	Explore with me: Pages 18-22
		4th Class	Peatlands: Our most efficient carbon sinks are disappearing at an alarming rate

			Explore with me: Deforestation pgs 112-115 <a href="https://www.youtube.com/watch?v=zHEqMscOzfw">https://www.youtube.com/watch?v=zHEqMscOzfw</a>
16. The Industrial Revolution Part 2 (History)	Can link global warming to burning fossil fuels	Sixth Class : 62	Powerpoint The industrial Revolution.pptx
17 & 18 Carbon sinks 2	Understands and can explain the importance of forests, oceans, mangroves, peatlands	Fourth Class: 31	EXPLORE WITH ME; Forestry in Ireland p110-112
		Fifth Class: 60	Powerpoints "Mangroves"  Mangroves (1).pptx
			Woodland.docx
19. Pollution in the ocean	How climate change and pollution are affecting the ocean	Fourth Class: 62	EXPLORE WITH ME: Pollution of the ocean p121-123
20. The Science of global warming	Understand and can articulate and discuss findings of IPCC	Sixth Class : 30	Science experiments to explain greenhouse gas.docx
21. Science Experiment and Investigations	Can understand what greenhouse gas emissions are doing to the environment	Fourth Class: 31	Experiments and investigations

## 2: Urgency of need for climate action

Lesson	Learning outcome	Taught to	When	Resources/links
				etc
22.	Pupils know that some impacts of our changing climate are happening now and	1st Class & 2nd	Ongoing	Project Honduras
Discussions of natural disasters	others will happen in the future	Class		
23.				
Topical events in other parts of				
the world				
(national geographic website)				

Lesson	Learning Outcome	Class taught and number of students	Resources/link/textbook
24. Who's doing something about the climate crisis?	Pupils can evaluate what groups are doing locally to mitigate climate change	Whole school: 540 pupils	https://www.youtube.com/watch?v=SDR HowtobeanactiveGlobalCitizen.pdf xfuEvqGg The time is now.docx Tree week GLOBE webinar.pptx
25. Why do we have to reduce our emissions?	Pupils can understand the importance of international targets for reduction of g.g.e	4 <sup>th</sup> class 5 <sup>th</sup> class 6 <sup>th</sup> class	EXPLORE WITH ME:pgs 64-67 and 99
			https://www.youtube.com/watch?v=uynhvHZUOOo

### 3: Impacts of climate change

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
26. Study of bees in Ireland. Discussions over their role in pollination. Explore why their numbers are dwindling. 27.	Pupils understand the impacts of our changing climate on some animals, plants and environments both in our locality and elsewhere	1st Class	April 2022	https://pollinators.ie/record- pollinators/

No mow May. 28. Complete a Flower Insect Timed Count -FITC in the school.				
29. EXPLORE WITH ME 2nd Class-'Reduce, reuse, recycle' 30. EXPLORE WITH ME 2nd Class-'Water conservation'	Pupils know some of the impacts of our changing climate on people, both in our locality and elsewhere	2nd Class	March/Aprl 2023	EXPLORE WITH ME-pg 53 EXPLORE WITH ME-pg 80

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
31 & 32	Children understand why biodiversity is a	Fourth (31)	Spring term	Ppt on dandelions
Biodiversity loss in	serious concern			Dandelion.pptx
Ireland		Sixth (60)		No Mow May No mow may.docx
33 & 34	Children understand why biodiversity is a	Fourth (31)	Spring term	The landscape of Ireland EXPLORE WITH ME: p108-111
Biodiversity loss in	serious concern	Sixth (60)	Spring term	Peatland factsheet.pdf
Ireland	Serious concern	Sixtii (00)		Teddana nacisneett.par
35 & 36	Children can evaluate the destruction of	Fourth (31)	Autumn	Plastic pollution
Climate crisis	ecosystems, loss of biodiversity		term 2022	
impacts locally and		Fifth (60)	Autumn	Action for global justice anty
globally		Fiftii (60)	term 2022	Action for global justice.pptx Challenges farmers face.pdf
			Autumn	<u>Chancinges farmers face.pur</u>
37.	Children can explore the ways in which animal		term 2022	
	and plant behaviour is influenced by environmental conditions		Autumn	https://www.worldwildlife.org/pages/living-planet-report-2022
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	environmental conditions	Third class	2022	Atmosphere & Climate EXPLORE WITH ME: p64-68
What's in our green				
spaces?				Explore with me : pgs 22-25
38.	Children understand the impact at local,	Sixth Class	Spring term	Nomads throughout time:
Who is being	national and global level	(60)	. 3	
affected ?				EXPLORE WITH ME:Pgs 112-115
				Climate-Justice-through-drama-Trocaire-2023.pdf
				primary-resource-2018 Trocaire.pdf

39. Climate refugees	Children can identify the countries most at risk and what might be the outcomes for them	Sixth class (60)	Autumn term	Nomads throughout time EXPLORE WITH ME: pgs 112-115  The Bedouin
				Irish Travellers Facts on climate refugees.docx
40.	Children understand the impact at local,	Fourth	Summer	An investigation of Sudan and Somalia
Emerging patterns in migration	national and global level	Class (31)	term	Reading-Comprehension-Activities-1 Somalia.pdf
41. Animal Extinction	Pupils can identify possible extinctions	Fourth Class (31)	Autumn term	Geibheann Géibheann agus ceisteanna CC4 CA ceachtanna.docx
42. Research on Activists	Pupils can identify a range of impacts of past and / or present	Fourth Class (31)	Summer term	A look at the work of Jane Goodall
ACTIVISTS				Podcast "Ecolution" <a href="https://www.rte.ie/radio/podcasts/22267495-ep-73-dr-jane-goodall/">https://www.rte.ie/radio/podcasts/22267495-ep-73-dr-jane-goodall/</a>
43. Palestine- past and present	Pupils can identify impact of conflict on people	Fourth class (31)	Summer term	https://www.trocaire.org/journey/tree-of-justice/#primary_palestin
44. Ecosystems	Pupils can identify changes in ecosystem	Fourth Class (31)	Summer term	https://climatekids.nasa.gov/10-things-ecosystems/ https://www.rte.ie/radio/podcasts/22265614-ep-72-rivers-deep-and-shallow-too/

## 4: Responses to climate change

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
45. Design a poster encouraging ways to cut down on carbon footprint. Brainstorm ways to reuse different items.	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	1st Class	December 2021	
46. Maths-barcharts of how they come to school.	Pupils can choose some actions they / their class / their school / their family could take to have a positive impact on the climate	1st Class 2nd Class	March 2023	Epak.ie https://pickerpalsworld.org/

47. Discussions around the impact of their choices-encouragement of WOW-'Walk on Wednesday' 48. IT- research on what can be recycled or composted Pickerpal programme			Pickerpal ongoing throughout the year	Water-Wishes-Resource-FINAL- 1.pptx
49. Casestudy - Save the Bees project. Examine why bee populations are declining and how we can help them. KWL charts, Can/Have/Are charts	Pupils can describe at least one simple / familiar example of how a group of people are taking positive climate action together	1st Class	May & June 2022	https://pollinators.ie/ Irish Bee Conservation Project Save the Bees

# 5: Consumption and climate justice

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
50. Discussion of how they can look after the planet-reducing, reusing and recycling as much and as often as they can.	Pupils know that many of the choices they and others make have an impact on the environment / climate	1st Class	December 2021	https://www.twinkl.ie/resource/us-a-207-recycling-sort-activity-sheethttps://www.twinkl.ie/resource/t-t-16397-five-ways-i-can-help-the-earth-writing-frame
51. Casestudy: choose an activity e.g. lunch waste weigh the amount waste at the end of the day over a week, create a chart. Discussions around the consequences of having so much waste. Identify better environmental choices. Create a follow up chart to see if anyone changed their action.	Pupils begin to be able to rank human activities they are familiar with e.g. how they travel to school, according to how much of an impact they have on the environment / climate.	2nd Class	June 2023	Class created charts

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
52. Fast fashion: winners and losers	Children understand some of the effects of fast fashion on the environment	4th class	Spring	Fast Fashion Powerpoint Fast fashion.pptx

				Manus bases dans
				Meara beaga.docx quiz on fast fashion
				https://docs.google.com/forms/d/13L44lFz1vPcOBaYgIpQmQyzCmU-
				tbMTYA07ppUmuSnQ/edit
53.	Children understand the effects that agriculture	4th class	Spring	Meat powerpoint
	<u> </u>	401 01033	Spring	
Meat eating; the	esp. Beef farming has			
pros and cons		5th class		Meat benefits and disadvantages.pptx
		6th class		
54 & 55	Children evaluate more sustainable fashion	4th class	Summer	Research
Alternatives to fast	Explore what "greenwashing" is. Who is doing it?	401 01833	Julillei	Nesedicii
fashion	Explore what greenwashing is. who is doing it:			
lasinon				Upcycle clothes
		6th class		Repurpose clothes
		Otti ciass		
				Design and make something using old clothes
56, 57 & 58.	Children realise that those least responsible for	3rd class	Spring	Fairtrade Cocoa
Fair and unfair trade	climate crisis are experiencing the most hardship	Ji u class	Jprilig	EXPLORE WITH ME: p50-54
		4.1		
		4th class		Is mise Kojo
				<u>Is mise Kojo.pdf</u>
				Clondalkin fairtrade ppt
				https://schools.fairtrade.org.uk/teaching-resources/patricks-virtual-visit
				Clondalkin Fairtrade Town.pptx
				https://drive.google.com/file/d/1VKBKC822nGnaOf2KzamAGANO4p4-
				bLw1/view?usp=drive_link
				https://www.trocaire.org/journey/tree-of-justice/#primary_guatemala
				Guatemala-Reading-Comprehension-Activities-1.pdf
	1	1	1	

59.	Evaluating the impact we have on our	3rd class	Autumn	https://greenschoolsireland.org/greenschools-quizzes/
Measuring the	environment	4th class		Human-Rights-Defenders-board-game-2023.pdf
impact		5th class		<u>Human-Rights-Defenders-Instructions-and-cards.pdf</u> water for life
		6th class		<u>Senior.docx</u>
				Water usage maths.docx

#### **6: Possible Futures**

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
60. Litter Picking Discussions of carbon footprint and brainstorm ways in which to mind the earth. Daily discussions over habits e.g. using the correct bin to dispose of our rubbish, turning off lights etc.	Pupils begin to understand that the future will be different depending on what we do now.	2nd Class	Ongoing throughout the year	Pickerpals-sharing of a litterpicker in the classroom.  Diary kept within the class of litterpicking adventures https://pickerpalsworld.org/.

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
61. Different futures	Children can imagine different futures if we do not act and discuss and write about these	4th class	Summer	Statistics from U.N, WHO etc
	futures			Art-and-Justice-PowerPoint-1.pptx
	.acares			Creative writing
				Our Land by Emithital Mahmoud.docx
				Poetry for global justice.docx
				Poetry for the Earth.docx Qs on our Earth by emithal mahmoud.docx
62.	Children can imagine more	4th class	Summer	Design and make a sustainable garden
Sustainable futures	sustainable lifestyles			GLOBE : How cool is your school
	· ·			<u>Teachers Guide grow plants from paper</u>
				Secondary Section 4 Nature Based Solutions.pptx.pdf

63.	Children understand that	4th class	Summer	Using statistics to predict likely outcomes
Earth's future	inaction will have serious			Creative writing : Imagine a world
	consequences			What do we need for a poem fighting words.docx
				Prince EA Dear Future Generations, Sorry
				https://drive.google.com/drive/u/0/folders/19y7DkFmGpPWNz_giamXFH8glyBgulbzy
64.	Children can understand the	6th class	Spring and	Imagine a chair Ellen Mc Arthur Foundation
Sustainable	importance of the circular		summer	Imagine a Chair   An Animated Explanation of Circular Economy
schools-sustainable	economy			
communities				
65.	Children can evaluate what is	4th		Writing letters to council with suggestions
Sustainable	being done by local council re	5th		<u>Teachers_Guide_to writing persuasivley for climate action</u>
Clondalkin?	circular economy, waste	6th class		GLOBE Ireland
	reduction etc			https://www.globe.gov/web/ireland/home/rivers-in-spring-campaign
			Spring	
				Celebrating biodiversity:EXPLORE WITH ME: pages 148-151
			Summer	Science: Experiments on water reduction Science: Planning a bee friendly garden

## **7: Mindsets and Viewpoints**

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
66. EXPLORE WITH ME 2nd Class-'Life in a floating village' 67. EXPLORE WITH ME 1-Diego and the banana plant'	Pupils are exposed to different viewpoints on the Earth, e.g. that of indigenous peoples.	1st Class 2nd Class	April 2022 May 2023	EXPLORE WITH ME 2- p77 EXPLORE WITH ME 1- p80

Lesson	Learning outcome	Taught	When	Resources/links etc
		to		
68 & 69. The Maori and the Sioux	Children understand the perspective of the Maori and other indigenous tribes compared with people in the Global North	3rd Class		Third class: The Maori Who Are The Māori People Of New Zealand?
		4th class		

70. The Incas	Understand the inca relationship with the Earth	6th class		Fourth class: The Sioux Powerpoint presentation "The Sioux" The Incas EXPLORE WITH ME: pages 200-205 The five pillars of islam: Grow in Love pages 138-141 Women of Faith: Grow in Love 122-125
71. People of the rainforests	Compare and contrast the views of indigenous tribes in Global South with consumers in Global North	4th Class	Autumn	Tribes of Rainforest Resource.pdf
72. Faith perspectives	Compare and contrast some faith perspectives on stewardship of the Earth	6th class	Spring	The five pillars of islam: Grow in Love pages 138-141 Women of Faith: Grow in Love 122-125 Introduction-to-Palestine-PowerPoint-1 (6).pptx
73. My influences	Evaluating who/what has influenced my perspective on the world	6th class	Summer	The World today: Conflict or co-operation EXPLORE WITH ME: pages 186-189 including the work of Irish Aid, GOAL, Trocaire and Concern.  Teachers Guide walk in anothers shoes
				https://www.irishaid.ie/teaching-and-learning/our-world-irish-aid-awards/our-world-awards-resources/name-1632-en.html



Pupil from Our Lady Queen of the Apostles reading Earth poetry, Dublin, Ireland

## 8: Feelings and Behaviours

Lesson	Learning outcome	Taught to	When	Resources/links etc
74. Creative writing lesson discussing possible futures	Pupils can talk about their own feelings about the earth, the natural world and the climate.	1st Class 2nd Class	June 2022 October 2022	Creative Writing Powerpoint

Lesson	Learning outcome	Taught to	When	Resources/links etc
75, 76 &77. My feelings about climate change (R.E, Literacy, Discussion, Surveys)	Children can speak about their feelings about the climate crisis	2nd class (60) 3rd class (60) 4th class (60) 5th class (60) 6th class	Autumn	Grow in love lessons  Poetry reading and writing  Peer learning and climate change books
78. Impacts of climate change on me and others (Geography, Literacy, Discussion, debates)	Children can Speak about their feelings about the impacts of the climate crisis using creative means	(60) 4th class (31) 5th class (30) 6th class	Autumn  Autumn  Autumn	Introduction-to-Somalia-PowerPoint (1).pptx
79. Climate change and me	Children can articulate the different feelings around climate change including contradictory ones	3rd class 4th class 5th class		Poetry writing workshops with Fighting Words, Poetry Ireland,

		6th class		
80. Making a change	Children can begin to do positive things at school, community, locally and nationally	3rd class	All year	Litter picking
		4th class	u u	Clean up of the local river
		5th class	u u	Recycling, upcycling, junk Art
		6th class	u u	WOW Persuasive writing
81. Clondalkin Climate champions	Children raise awareness of initiatives	Jun. infants- Sixth	All year But especially during Climate Action week	Powerpoints on Climate action weeks 2022 and 2022 Climate action week.pptx
				Be Fair, be Sustainable <u>Clean and</u> <u>sustainable Clondalkin (1).pptx</u>



Pupils at Our Lady Queen of the Apostles helping with a river clean up

### Aplerbecker Grundschule, Dortmund, Germany

throughout the year: black font

autumn term: blue font (August to January) summer term: red font (February to summer)

project week: green font

End of Year 2 Outcomes	<u>Learning</u> Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link
Scientific Background			
Pupils understand that some human activity causes pollution in the air which is affecting the world's climate / making the world hotter	science topic: The ecological footprint Children work on different aspects concerning the ecological footprint: mobility, shopping, nutrition, housing/energy	read texts, answer questions, reflection of own activities (their way to school, use of energy, shopping/eating habits,),	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9Ic4E2k xdiOX6Up0MgF?usp=drive link (ecologial footprint)
Pupils understand the distinction between 'weather' and 'climate'	Daily Weather chart/calendar where children talk about the weather and change it where necessary. Science topicdays/months/seasons	Each day, children change the calendar including weather.	daily calendar in all classes: https://www.verlagruhr.de/Der-Universal-Kalender-fuer-Kita- und-Grundschule/9783834648921  https://drive.google.com/drive/folders/15vUPXvwKeelNAd2sRj
	sustainability, year 1, science	clarify term" climate"	yf1qK3BMT0Ecsm?usp=share_link (sustainability)  https://www.kika.de/checker-welt/checker-reportagen/checker-tobi/videos/der-klima-check-100

Pupils know that the climate is always changing but is changing faster today than it has before	project week, exhibition about climate change class talk	Talking about it during the project week and in the exhibition: effects of e.g. liginite mining	book: "Umwelt und Energie"  https://www.carlsen.de/hardcover/frag-doch-mal-die-maus- umwelt-und-energie/978-3-551-25268-5
Pupils know that trees help to cool the world down.	forest days	walk into the forest, get to know different trees, discover the environment	
Impacts of Climate Change			
Pupils understand the impacts of our changing climate on some animals, plants and environments both in our locality and elsewhere	sustainability, year 1, science	Pupils get information on bees and how they live. They learn how important bees are for the environment and what is harming them.	https://drive.google.com/drive/folders/15vUPXvwKeeINAd2sRj yf1qK3BMT0Ecsm?usp=share link (sustainability) https://www.bmuv.de/publikation/malbuch-mein-klimabuch
			Bee/Insect hotel:  https://www.geo.de/geolino/basteln/21688-rtkl-bunte- nisthilfen-wir-bauen-insekten-dosen
Pupils know some of the impacts of our changing climate on people, both in our locality and elsewhere	students notice the effects e.g. by rising food prices due to bad harvests; flood disasters and droughts; forest firesor also by worse harvests in the school	discussions with the class, exhibition on climate change, work in the school garden	book: "Die Umweltkonferenz der Tiere" <a href="https://www.carlsen.de/hardcover/die-umweltkonferenz-der-tiere/978-3-551-25315-6">https://www.carlsen.de/hardcover/die-umweltkonferenz-der-tiere/978-3-551-25315-6</a>
	garden (but these would be rather long-term observations), in the exhibition on climate change this was also a topic (african countries!?)		book: "Klimahelden" https://www.grueneerde.com/de/produkte/kinder/kinder- spielzeug/buch-klimahelden/ge-p- 48797.html?sourceTLD=de&utm_content=kinderbuecher&utm term=48797&utm_source=google&utm_medium=cpc&utm_c ampaign=always- on_hc8_shopping_de&adtype=pla&product_id=48797&campai gn=15705983212&adgroupid=133263263002&gclid=EAlalQobC hMI9- 6JmKvC_wlVi9Z3ChOS_gWtEAQYASABEglZbPD_BwE&ALLOW_C OOKIES=FUNCTIONALITY

Urgency of Need for Climate Action			
Pupils know that some impacts of our changing climate are happening now and others will happen in the future	science classroom discussions, exhibition on climate change	class discussions; agreements such as waste avoidance to stop climate change as best as possible	exhibition  book: "Umwelt und Energie"  https://www.carlsen.de/hardcover/frag-doch-mal-die-maus- umwelt-und-energie/978-3-551-25268-5
Responses to			
Climate Change			
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	renewable energy: year 2, science	Children learn how electricity is generated and what we need electricity/energy for. They get to know the advantages of renewable energy (solar power/wind power/hydroelectric power) in comparistion to non-renewable energies and build different models.	https://drive.google.com/drive/folders/1xIWNyTvhYRtmNvMtg QZj8OUrtwKGzr9-?usp=share link (renewable energy)
	ecological footprint, year 2,	ecological footprint: s.o.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9Ic4E2k xdiOX6Up0MgF?usp=drive_link (ecologial footprint)
	science	sustainability: s.o.	https://drive.google.com/drive/folders/15vUPXvwKeeINAd2sRj yf1qK3BMT0Ecsm?usp=share_link (sustainability)
	sustainability, year 1, science		
			https://www.bmuv.de/publikation/malbuch-mein-klimabuch
Pupils can choose some actions they / their class / their school / their family could take to have a positive impact on the climate	science topic: recycling/waste	In school, we have three coloured bins (blue:paper, yellow: plastics, grey: residual waste). The children know what goes into each colour bin and the reason behind doing this.  They have gained the knowledge to use the bins correctly and promote recycling at home	signs on bins: https://www.zaubereinmaleins-shop.de/?s=M%C3%BCll  garbage license: https://eduki.com/de/material/221113/mull-recycling-als-ubungsheft-fur-die-1-klasse

		garbage license: worksheets/tasks on waste and recycling	https://drive.google.com/drive/folders/15vUPXvwKeeINAd2sRj yf1qK3BMT0Ecsm?usp=share_link (sustainability)
	Sustainability, year 1, science	sustainability: s.o.	https://www.bmuv.de/publikation/malbuch-mein-klimabuch
	climate strike within the project week		
	waste detectives, year 2, science	Children get information about waste, the separation of waste, waste reduction.	hhttps://drive.google.com/drive/folders/1VQA- zWt88FX2M2B3kX4KToYgYS09Tc4r?usp=share_link (waste_detectives)
Pupils can describe at least one simple / familiar example of how a group of people are taking positive climate action together	climate strike within the project week		
Consumption and			
<b>Climate Justice</b>			
Pupils know that many of the choices they and others make have an impact on the	ecological footprint, year 2, science	ecological footprint: s.o.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9Ic4E2kxdiOX6Up0MgF?usp=drive_link (ecologial footprint)
environment / climate	waste detectives: s.o.	S.O.	https://drive.google.com/drive/folders/1VQA- zWt88FX2M2B3kX4KToYgYS09Tc4r?usp=share_link (waste detectives)
Pupils begin to be able to rank human activities they are familiar with e.g. how they travel to school,	science lesson: road safety training: traffic rules/school way (year 1, beginning of school year)	Children talk about how they travel to school, describe alternatives.	
according to how much of an impact they have on the environment / climate.	ecological footprint, year 2, science	ecological footprint: s.o.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9lc4E2k xdiOX6Up0MgF?usp=drive link (ecologial footprint)

Possible Futures			
Pupils begin to understand that the future will be different depending on what	renewable energy (science, year 2)	s.o.	https://drive.google.com/drive/folders/1xIWNyTvhYRtmNvMtg QZj8OUrtwKGzr9-?usp=share_link (renewable energy)
we do now.		S.O.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9Ic4E2k xdiOX6Up0MgF?usp=drive_link (ecologial footprint)
	ecological footprint, year 2, science		Autoxoopolvigi : usp-urive_min (ecologiui rootprint)
	climate strike within the project week	S.O.	https://drive.google.com/drive/folders/1VQA- zWt88FX2M2B3kX4KToYgYS09Tc4r?usp=share_link (waste detectives)
	waste detectives: s.ol		
Mindsets and			
Viewpoints			
Pupils are exposed to different viewpoints on the	science	teaching units on nature-based peoples and their life in and with nature	book: "Regenwald und Dschungelwelt"  https://www.weltbild.de/artikel/buch/regenwald-und-
Earth, e.g. that of indigenous peoples.	upcoming project week		dschungelwelt 29097641-1
Feelings and			
Behaviours			
Pupils can talk about their own feelings about the earth,	project week	in a familiar environment, students can talk about their feelings or experiences	book: "Vom kleinen Eisbären, dem zu warm geworden ist"  https://www.oekom.de/buch/vom-kleinen-eisbaeren-dem-es- zu-warm-geworden-ist-9783962381745
the natural world and the climate.	classroom discussions		Zu warm geworden ist 37 03302301743

S	School: Aplerbecker Grundschule Year Group: 3/4			
End of Year 4 Outcomes	<u>Learning</u> Opportunities/ Subject Links	<u>Learning Task/ Learning</u> <u>Activity</u>	Resource Link	
Scientific Background				
Pupils understand that burning coal, oil and gas has an impact on the climate and have a basic understanding of the scientific processes involved	The ecological footprint, science, year 3/4: Children work on different aspects concerning the ecological footprint: mobility, shopping, nutrition, housing/energy  Renewable energies, science, year 3:  Energy and energy conversion, science, year 4	read texts, answer questions, reflection of own activities (their way to school, use of energy, shopping/eating habits,),	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9Ic4E2kxd iOX6Up0MgF?usp=share link (ecological footprint)	
Pupils are familiar with the terms 'atmosphere', 'Climate Change' and 'greenhouse gas emissions'	posters and experiments about these terms	read texts, look at posters, experiments, games	http://www.pindactica.de/selbermachen/co2-treibhaus-gas- experiment/ pdf-document	
Pupils know that some natural processes like trees growing, healthy soils and oceans take greenhouse gases out of the atmosphere	Forest and its sustainable use, science, year 3	Rad texts, watch films, lapbook about trees	https://www.betzold.de/prod/E_755542/?utm_source=nextag&_utm_medium=cpc_campaign&utm_campaign=product&pup_e=1_3&pup_cid=251331&pup_id=755542&utm_term=365323747221_548403  Lapbook: https://materialwiese.de/2017/07/wald-lapbook-im-sachunterric.html	

<b>Impacts of Climate</b>			
Change			
Pupils can identify a range of impacts of past and / or present climate change on plants and animal species, including extinctions, and on environments locally and across the world	Water is life, science, year 3/4: The children learn where water comes from, consider how we use and pollute water, explore how to make water clean again. They find out ways to save water and keep it clean.	The children read texts and work on worksheets. They do an experiment on filter systems to make water clean again.	https://drive.google.com/drive/folders/1VJY2RGnIJpJLsCLZHmLp 4bcc4lpA0WLo?usp=share_link (water is life)
Pupils can identify a range of observed impacts of our changing climate on people locally and across the world.	exhibition ("Parents for Future"), news (Logo)	pictures of dry rivers, floods, droughts, fires	catalogue "Klimawandel" by "Parents for Future" <a href="https://www.parentsforfuture.de/de/node/3786">https://www.parentsforfuture.de/de/node/3786</a>
Urgency of Need			
for Climate Action			
Pupils can explain why many institutions have declared a 'Climate Emergency', and what this means (see 'Impacts of Climate Change')	science/ german year 4	watch films/ short clips and discussion/ write an argumentation/ read newspaper article	https://www.faz.net/aktuell/politik/inland/wieso-immer-mehr-staedte-in-deutschland-den-klimanotstand-ausrufen-16305725.html#void https://blog.energiedienst.de/klimanotstand/
			(videos can be found on the websites)
Pupils know about some of the impacts that higher temperatures are having on people already.	science/ german/ arts year 3	read a picture book, vocabulary development, worksheets on some of the impacts, discussions, paint pictures on the topic of climate change and its impact on our world	picture book "Wie viel wärmer ist 1 Grad?" + learning materials (BELTZ&Gelberg https://www.beltz.de/kinderbuch_jugendbuch/produkte/details/ 42628-wie-viel-waermer-ist-1-grad.html  https://www.beltz.de/fachmedien/paedagogik/produkte/details/ 45386-wie-viel-waermer-ist-1-grad-was-beim-klimawandel- passiert-von-kristina-scharmacher-schreiber-und-stephanie- marian.html
Responses to			
Climate Change			

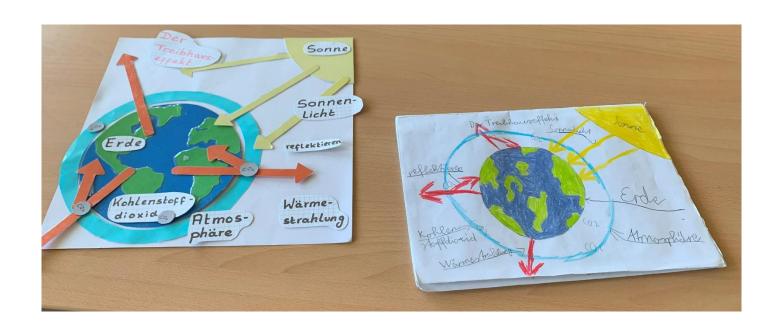
Pupils understand how using less energy can reduce emissions	The ecological footprint, science, year 3/4 + year 4	S.O.	hhttps://drive.google.com/drive/folders/1IZj8FhxyGfEkK9Ic4E2kx diOX6Up0MgF?usp=share link (ecological footprint)
Pupils understand what renewable energy is and can explain why it is important in reducing greenhouse gas emissions	The ecological footprint, science, year 3/4	S.O.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9lc4E2kxd iOX6Up0MgF?usp=share_link (ecological footprint)
Pupils understand the importance of trees for the climate and can explain why protecting / replanting forests is important for the climate	forest, s.o. + forest day with forest educators (all year groups/ different levels)	s.o. excursion to the forest + information given by forest educators	none
Pupils can identify actions that they can take personally to reduce emissions / promote carbon sinks	The ecological footprint, s.o.	5.0.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9lc4E2kxd iOX6Up0MgF?usp=share_link (ecological footprint) https://drive.google.com/drive/folders/1VJY2RGnIJpJLsCLZHmLp 4bcc4lpA0WLo?usp=share_link (water is life)
Pupils can identify actions that can be taken at the level of their school and locality	Water is life, s.o. Environmental protection in everyday lives, year 3/4	s.o.  The children think about how they can protect the environment within their everyday lives. They invent games, that are made out of rubbish and get to know environmentally friendly ways to play and move. The children learn about a new way of shopping and visit an unpacking store in Aplerbeck.	https://drive.google.com/drive/folders/1L03WGxTOPUewY324vu CVPOVGuCjTvgml?usp=share_link (environmental protection)
Pupils understand that leaders of governments make agreements with each other about climate action and can identify some of the content of these agreements	science year 4	Watching short clips about World Climate Agreement, talking about it on a simple level, searching for information on a website (topic is not easy to understand for younger children) Compare the schools' strike day/ protest march to larger circles, e.g. Fridays for Future or decisions of politicians, Text "Politiker überlegen sich Lösungen zum Schutz des Klimas"	https://www.zdf.de/kinder/logo/un-klimakonferenz-122.html  https://youtu.be/ch11zXFXb8o  https://youtu.be/SREtWjmfkgA
			https://www.beltz.de/fachmedien/paedagogik/produkte/details/ 45386-wie-viel-waermer-ist-1-grad-was-beim-klimawandel-

			passiert-von-kristina-scharmacher-schreiber-und-stephanie-
Pupils can name different examples of how a group are taking climate action together and can talk about the outcomes.	Climate strike day	+ compare the schools' strike day/ protest march to larger circles, e.g. Fridays for Future or decisions of politicians	marian.html
Consumption and			
Climate Justice			
Pupils can name some of the things that they and others do that are responsible for climate change	The ecological footprint, s.o.  Microplastics, science, year 3/4: The children are made aware of plastic products in their everyday life. They learn about microplastics in our environment and get to know waste reduction strategies.	The pupils read texts, watch films, get to know the microplastic circle and how they can avoid microplastics in their lives,	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9lc4E2kxd iOX6Up0MgF?usp=share_link (ecological footprint) https://drive.google.com/drive/folders/1- lcGyJVWaf8drmMYhH1cBtCdp_XT5_z0?usp=share_link (microplastics) https://drive.google.com/drive/folders/1qv7tPxl- ZCdN8djXA0g_r7JeK1Pmgiyc?usp=share_link (upcycling)
	Upcycling, science/art, year 3/4: The children learn about waste and waste production and reduction. They get to know ways to reuse waste.	Pupils gain knowledge about waste (different types of waste, waste separation, how to avoid waste). They reuse waste for different artificial projects such as building birdhouses, instruments, games, toys,	
Pupils begin to explore alternatives to these activities which are less harmful	Environmental protection in our everyday lives, s.o.  Microplastics, s.o.	S.O	https://drive.google.com/drive/folders/1L03WGxTOPUewY324vu CVP0VGuCjTvgml?usp=share link (environmental protection)  https://drive.google.com/drive/folders/1- lcGyJVWaf8drmMYhH1cBtCdp XT5 z0?usp=share link (microplastics)
Pupils understand that you can measure how much impact an activity has and know that different lifestyles have a greater or lesser impact	The ecological footprint, s.o.	S.O.	https://drive.google.com/drive/folders/1IZj8FhxyGfEkK9lc4E2kxd iOX6Up0MgF?usp=share_link (ecological footprint)

Pupils understand that some individuals and countries are more responsible than others for greenhouse gas emissions to date	science year 3	test prior knowledge in plenary, watch film on the topic, talk about learning gains and discuss the topic	film: "Kinder der Klimakrise: 4 Mädchen, 3 Kontinente, 1 Mission" (not available via media libraries at the moment, but broadcast dates on TV every now and then) https://programm.ard.de/TV/Programm/Sender/?sendung=2872 54000683102
		text and video "Klimagerechtigkeit für Kinder erklärt"	https://kinder.wdr.de/tv/neuneinhalb/sendungen/umwelt-und-klima/sendung-klimagerechtigkeit-100.html
<b>Possible Futures</b>			
Pupils can imagine different futures within their own likely lifetimes based on different levels of heating, including optimistic scenarios	science year 3 and 4	think about possible futures, read text "Vorhersagen für die Zukunft", discuss the different scenarios, think about what we could do to make a change	material: BVK-Verlag "Projektmappe Klimawandel" (ISBN 978-3-96520-059-3)
	sciene year 4	building climate friendly houses (facts in films, texts, etc.)	http://www.wdrmaus.de/extras/mausthemen/klimawandel/index.php5
Pupils know that action or lack of it now will have an effect on these different futures.	s.o.	(combinded with "Pupils can imagine different futures within their own likely lifetimes based on different levels of heating, including optimistic scenarios")	s.o.
Mindsets and			
Viewpoints			
Pupils are exposed to viewpoints on the climate crisis, including people of colour and / or people of the Global South expressing their view in their own words.	science year 3	test prior knowledge in plenary, watch film on the topic, talk about learning gains and discuss the topic of climate injustice  (combined with "Pupils understand that some individuals and countries are more responsible than others for greenhouse gas emissions to date")	film: "Kinder der Klimakrise: 4 Mädchen, 3 Kontinente, 1 Mission" (not available via media libraries at the moment, but broadcast dates on TV every now and then) https://programm.ard.de/TV/Programm/Sender/?sendung=2872 54000683102
Feelings and			
Behaviours			
Pupils can talk about their feelings about the earth and the natural world, our changing climate and its	all year groups	talking about their feelings concerning every subtopic whenever it was taught	no material needed

impacts. They know that others have a range of different feelings, including anxiety and fear			
Pupils begin to understand that doing positive things for the climate can help you feel less worried	all year groups	talking about things that could make a change within every subtopic whenever it was taught	no material needed
		collecting ideas (simple changes in our life for a bigger change)	
	free-choice-learning	reading cards with tips	Riva-Verlag "55 gute Taten für Kinder – Deine Nachhaltigkeits- Challenge" <a href="https://www.m-vg.de/riva/shop/article/20352-55-gute-taten-fuer-kinder/">https://www.m-vg.de/riva/shop/article/20352-55-gute-taten-fuer-kinder/</a>

#### Global warming diagrams created by pupils at Aplerbecker Grundschule



#### Akdeniz Yukselis Primary School, Antalya, Turkey

#### Ages 7 – 9

#### 1. Scientific Background

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils understand that burning coal, oil and gas has an impact on the climate and have a basic understanding of the scientific processes involved	Science – Unit 5 Exploring the World	Mining, drilling, and burning dirty energy are harming the environment and our health. Here's everything you need to know about fossil fuels, and why we need to embrace a clean energy future.	PP Slide:  Fossil Fuels.pptx  https://ugc.berkeley.edu/background-content/burning-of-fossil-fuels/
			https://www.youtube.com/watch?v=gBLQUplzZZo
Pupils are familiar with the terms 'atmosphere', 'Climate Change' and 'greenhouse gas	Science Unit 5 Exploring the World	Illustrations describing: What is atmosphere?	https://climatekids.nasa.gov/menu/atmosphere/ https://climatekids.nasa.gov/whats-in-the-atmosphere/
emissions'		What are the names of the layers?	https://www.youtube.com/watch?v=G4ZIa3qkFkI
			https://www.youtube.com/watch?v=5sg9sCOXFIk

		What is the importance of each layer? are shown.	https://climatekids.nasa.gov/greenhouse-cards/
		What is a greenhouse?	https://climatekids.nasa.gov/greenhouse-cards/
		What are greenhouse gases?	https://www.youtube.com/watch?v=SN5-DnOHQmE
		How do they affect "Climate Change"?	
Pupils know that some	English – Unit 3 – Module 2	How old is our planet?	https://wwf.panda.org/discover/knowledge hub/where we work/amazon/about the amazon/why amazon im
natural processes like trees growing, healthy			portant/
soils and oceans take greenhouse gases out of the atmosphere	Planet Earth	What are the issues that result from human activities and natural disasters?	https://www.youtube.com/watch?v= wVY1kDIIB0
		How is Mother Earth dealing with the greenhouse gases?	Amazon.pptx
		The Amazon rainforest has long been recognized as a repository of ecological services not only for local tribes and communities, but also for the rest of the world. It is also the only rainforest that we have left in terms of size and diversity.	

### 2. Urgency of Need for Climate Change

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can explain why many institutions have declared a 'Climate Emergency', and what	Science Unit 5 Exploring the World	What do we need to do to limit global warming and act on the climate emergency?	https://www.unep.org/explore-topics/climate- action/facts-about-climate-emergency
this means (see 'Impacts of Climate Change')		The UNEP Climate Action Note shows you the global state of the climate emergency and its development.	https://www.unep.org/explore-topics/climate- action/what-we-do/climate-action-note/state-of- climate.html
Pupils know about some of the impacts that higher temperatures are having on people already.	English Unit 5 Around Me	It snowed in Antalya after 30 years. Does it have a connection with climate change?	https://www.loveexploring.com/gallerylist/97397/the-worlds-most-unexpected-weather-events

#### 3. Impacts of Climate Action

End of Year 4	Learning	Learning Task/ Learning Activity	Resource Link
<u>Outcomes</u>	Opportunities/		
	<u>Subject Links</u>		
Pupils can identify a	Science	What is biodiversity?	https://kids.nationalgeographic.com/science/article/habi
range of impacts of past and / or present climate	Unit 5		tat-destruction
change on plants and	Exploring the World	How is it effected by climate change?	
animal species,			https://www.youtube.com/watch?v=ErATB1aMiSU
including extinctions, and on environments		How do you think all species are affected by	
locally and across the world.		climate change and can you describe the difference?	How to support climate action & biodiversity in the support climate action of biodiversity in the support climate
		The variety of the species changed.	10 Statement Winnie Course and Bioliferacity Interfactors and profession of the Course and Bioliferacity Interfactors and profession of the Course and Bioliferacity Interfactors and profession of the Course and Course an
			https://ec.europa.eu/research-and-
			innovation/en/horizon-magazine/climate-change-and-
			biodiversity-loss-should-be-tackled-together
			https://www.fs.usda.gov/ccrc/topics/biodiversity

Pupils can identify a range of observed impacts of our changing climate on people locally and across the world	Pupils could observe the change in climate by themselves in advance last year when it snowed in Antalya.  It had been approximately 30 years since the last time it snowed in our city.	

#### **4. Responses to Climate Change**

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils understand how using less energy can reduce emissions	Science Unit 5 Exploring the World	Brainstorm : Do we use fossil foils in our local area? If so how?	https://climatekids.nasa.gov/menu/energy/
Pupils understand what renewable energy is and can explain why it is important in reducing greenhouse gas emissions	English Unit 5 Around Me	Let's try not to use the products that cause greenhouse gas emissions for a day. Is it possible?	Good Ozone  Bad Ozone

Pupils understand the importance of trees for the climate and can explain why protecting / replanting forests is important for the climate	English Unit 5 Around Me		
Pupils can identify actions that they can take personally to reduce emissions / promote carbon sinks	Science Unit 5 Exploring the World	Let's try to limit your water usage tomorrow!	https://www.youtube.com/watch?v=nTcFXJT0Fsc
Pupils can identify actions that can be taken at the level of their school and locality	Science Unit 5 Exploring the World	Brainstorm:  What can we do to reduce the pollution all together?	https://www.youtube.com/watch?v=OqHp03RRTDs
Pupils understand that leaders of governments make agreements with each other about climate action and can identify some of the content of these agreements		The Paris Agreement is a legally binding international treaty on climate change.	What is the 'Paris Agreement', and how does it work?  https://www.youtube.com/watch?v=WiGD0OgK2ug&fea ture=emb_imp_woyt  https://unfccc.int/process-and-meetings/the-paris- agreement/the-paris-agreement  5-YEAR CYCLE INCREASINGLY AMBITIOUS CLIMATE ACTION  AND TO SEE THE CYCLE INCREASINGLY AMBITIOUS CLIMATE ACTION  AND TO SEE THE CYCLE INCREASINGLY AMBITIOUS CLIMATE ACTION  AND TO SEE THE CYCLE  THE CYCLE  AND TO SEE THE CYCLE  THE CYCLE  AND TO SEE THE CYCLE  THE CYCLE

Pupils can name	Science	Raising Awareness:	https://www.youtube.com/watch?v=zaXBVYr9Ij0
different examples of	of Unit 5		
how a group are tak	_		
climate action toget	her Exploring the World		
and can talk about tl	he		
outcomes.			

#### **5 Consumption and Climate Justice**

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can name some of the things that they and others do that are responsible for climate change.	English Unit 5 Around Me	Choose a date for Climate Strike Day.	
Pupils begin to explore alternatives to these activities which are less harmful	Science Unit 5 Exploring the World		https://www.youtube.com/watch?v=OasbYWF4_S8
Pupils understand that you can measure how much impact an activity has and know that different lifestyles have a greater or lesser impact			

Pupils understand that	English	Climate Court Game:	https://www.youtube.com/watch?v=Oq-14b18Lng
some individuals and	Unit 5	1 Judge	
countries are more		42.1	
responsible than others	Around Me	12 Juries	
for greenhouse gas		Victims and Criminals representing the	
emissions to date		whole society	

#### **6 Possible Futures**

End of Year 4 Outcomes	<u>Learning</u> <u>Opportunities/</u> Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils know that action or lack of it now will have an effect on these different futures.	English Unit 5 Around Me	Choose a date for Climate Strike Day.	https://cdn-tema.mncdn.com/Uploads/Cms/iklim-degisikligi-ve-etkileri.pdf

#### **7 Mindsets and Viewpoints**

End of Year 4	Learning	Learning Task/ Learning Activity	Resource Link
<u>Outcomes</u>	Opportunities/		
	Subject Links		
Pupils are exposed to	Science	Do we have "alternatives", if so what are	
viewpoints on the	Unit 5	they?	
climate crisis, including			
people of colour and /			

or people of the Global	Exploring the World	
South expressing their		
view in their own		
words.		

#### **8 Feeling and Behaviours**

End of Year 4 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can talk about their feelings about the earth and the natural	Science Unit 5	What are your thoughts about the future?	
world, our changing climate and its impacts. They know that others	Exploring the World	Let's Act Our Feelings Out!	
have a range of different feelings, including anxiety and fear		Pupils execute their real feelings about losing nature and their beloved ones including family and pets?	

Pupils begin to understand that doing positive things for the climate can help you feel less worried	Art Unit 7 The Blues	Draw! : How do you feel about the future of the World?	LESS ARTS TO COMPANY T
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#### Ages 9 – 11

### 1. Scientific Background

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can clearly articulate the link between burning fossil fuels and climate change using appropriate scientific vocabulary	Science – Unit 4 Global Warming	Learn how human use of fossil fuels—non-renewable energy sources, such as coal, oil, and natural gas—affect climate change.	COP26_Climate-our -future-powerpoint  makingsenseofclim atechange_part5.pp

Pupils know what the Intergovernmental Panel on Climate Change is and can discuss some recent	Science – Unit 4 Global Warming	A carbon sink absorbs carbon dioxide from the atmosphere. The ocean, soil and forests are the world's largest carbon sinks.	https://www.nationalgeographic.com/environment/article/fossil-fuels  Carbon_Sequestration.ppt https://www.youtube.com/watch?v=OoW2PlvMpZs
Pupils can name key carbon sinks such as forests, peatlands, oceans, algal blooms, and healthy soil.	Social Studies – Unit 3 Our World, Our Home	The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.	https://www.youtube.com/watch?v=miYW823AlZE https://www.youtube.com/watch?v=nahl5b2_x8l https://www.ipcc.ch/report/ar6/wg3/

# 2. Urgency of Need for Climate Change

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can give examples of institutions that have declared a 'climate emergency' at different scales and are aware of synonyms such as 'climate crisis'.		Think of the last natural disasters that you have encountered with. Think of the ways that they are related to the climate change.	Social Sciences.pdf

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.	Name some of the activities that influences the environment and let the students name some.	https://www.nationalgeographic.com/environment/article/freshwater-crisis
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	Pick A Country: What can be the social, environmental, economic and psychological problems that someone from has because of the climate change?	
Pupils know about current trends in total global climate emissions, i.e. whether they are rising, peaking or falling	Earth was covered with water at that time, whereas today the Earth's surface is partly land mass.	https://justdiggit.org/climate- change/?gclid=CjwKCAjwg5uZBhATEiwAhhRLHs25CVh- NiSxJNR_WFEOabOu3TVmYQylWkp997s9KqQOU- 8xa46VVBoCiplQAvD_BwE
Pupils begin to understand what climate tipping points are and can connect		Climate_Change_Pr esentation.ppsx

these with the urgency		
to act		

## 3. Impacts of Climate Action

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils understand how climate change is a factor in the current loss of biodiversity and can describe some future predictions in connection with this	Science – Unit 4 Global Warming	Challenge:  Try zero waste challenge for a week. What would change?	ZWD-Flyer-Fall-202 2-Color.pdf
Pupils understand the impact of climate change on ecosystems locally and across the world, both in the present and a range of future scenarios	English – Unit 7 Big Problems	Plan a visit to Dekamer.	https://www.dekamer.org.tr/projeler.html
Pupils can identify a range of impacts of our changing climate on people in the past and present, in their local	Science – Unit 4 Global Warming	What's the real cause of climate change in our modern time?	1001188071.pdf  https://www.youtube.com/watch?v=_DH2uZhTPCs

area and also across the world			
Pupils can identify current impacts, and a range of predicted future impacts depending on levels of heating, including human migration.	Social Studies – Unit 3 Our World, Our Home	In 1990, the Intergovernmental Panel on Climate Change (IPCC) noted that the greatest single impact of climate change could be on human migration—with millions of people displaced by shoreline erosion, coastal flooding and agricultural disruption.	https://hdr.undp.org/content/climate-change-and-forced-migration?utm_source=EN&utm_medium=GSR&utm_cont_ent=US_UNDP_PaidSearch_Brand_English&utm_campaign=CENTRAL&c_src=CENTRAL&c_src2=GSR&gclid=CjwKCAjw_m8WZBhBUEiwA178UnDOHYIzs9zvt9F_eSamruNrzIl9RWJe_fE3pQvK42LxP7CZBKs8uYlhoCWcAQAvD_BwE_

# 4. Responses to Climate Change

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils are familiar with a range of different climate action strategies including reducing consumption, using renewable energy and protecting/ restoring carbon sinks	Science – Unit 4 Global Warming	Try to limit your water consumption for a week. What would change?	https://www.youtube.com/watch?v=Cr9dCwlkBCY
Pupils begin to discuss what makes some strategies more effective than others	Science – Unit 4 Global Warming	Discuss what can be done according to proffesionals.	https://www.imperial.ac.uk/stories/climate-action/ https://www.unep.org/news-and-stories/story/10-ways- you-can-help-fight-climate-crisis
Pupils can identify actions they can take	English – Unit 7	Plan a visit to Dekamer.	https://www.dekamer.org.tr/projeler.html

personally and with a group of which they are part	Big Problems		
Pupils are familiar with actions that are being taken locally, nationally; and with key content of international agreements	Social Studies – Unit 3 Our World, Our Home	The Paris Agreement is a legally binding international treaty on climate change.	https://www.youtube.com/watch?v=WiGD00gK2ug&feature=emb_imp_woyt  https://unfccc.int/process-and-meetings/the-parisagreement/the-paris-agreement  5-YEAR CYCLE  INCREASINGLY AMBITIOUS CLIMATE ACTION
Pupils begin to form their own opinions on these responses	Social Studies – Unit 3 Our World, Our Home		
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	Social Studies – Unit 3 Our World, Our Home	Raising Awareness	https://www.youtube.com/watch?v=zaXBVYr9Ij0
Pupils can discuss what makes for effective climate action	Climate Strike Day 7 <sup>th</sup> October	Climate Strike Day 7 <sup>th</sup> October	Climate Strike Day 7 <sup>th</sup> October

# **5 Consumption and Climate Justice**

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can clearly make the connection between climate change and things that they and others consume / activities they and others participate in	Science – Unit 4 Global Warming	Role Play  Good Cop – Bad Cop  Oxygen vs CO2 – Greenhouse Gases	https://www.greenpeace.org/international/story/55678/our-transport-system-is-fuelling-the-multiple-crises-were-facing-lets-use-it-to-fight-them/
Pupils understand that different lifestyles cause much lesser or greater carbon emissions	Social Studies – Unit 3 Our World, Our Home	Write a letter to the municipality about taking legal actions for people acting irresponsibly.	According to Greenpeace: <a href="https://www.greenpeace.org/international/story/51742/a">https://www.greenpeace.org/international/story/51742/a</a> -year-of-record-breaking-extreme-weather/
Pupils can suggest a range of alternatives which might reduce greenhouse gas emissions			The Greenhouse Effect  Some solar radiation is reflected by the Earth and the passes through the atmosphere. Some is absorbed and re-emitted in an another in a model. The Earth's surface and the lower atmosphere and the lower atmosphere and the lower atmosphere.  Most radiation is absorbed by the Earth's surface and the lower atmosphere.  Infrared radiation is emitted by the Earth's surface.
Pupils can explain simply what a carbon footprint of an individual, a product, or an activity is	Science – Unit 4 Global Warming	How to calculate your carbon footprint?	Let's count carbon footprint!  https://www.carbonfootprint.com/calculator.aspx

Pupils can explain how some countries are more responsible than others for producing greenhouse gas emissions and compare this with where the climate crisis has the most severe impacts. They can use this information to begin to develop their own ideas about rights and responsibilities now and in the future	Science – Unit 4 Global Warming	Challenge: Try zero waste challenge for a week. What would change?	
responsibilities now and in the future			

## **6 Possible Futures**

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can outline different possible future scenarios - typically in 2100 - depending on levels of heating	Social Studies – Unit 3 Our World, Our Home	Interview  Arrange an interview with the local people about the effects of the climate change.	https://www.greenpeace.org/international/story/55698/s aying-no-to-pollution-inspiring-actions-in-the-peoples- fight-for-clean-air/

Pupils have an understanding of current scientific consensus on what these future scenarios may look like, including	Social Studies – Unit 3 Our World, Our Home	Write a letter to the municipality about taking legal actions for people acting irresponsibly.	https://www.greenpeace.org/international/story/51742/a -year-of-record-breaking-extreme-weather/
Pupils begin to understand the lack of certainty in future predictions			
Students know that our scientific understanding is developing and being revised	Social Studies – Unit 3 Our World, Our Home	Be a part of a plan that contributes to climate strike.	https://www.greenpeace.org/international/story/54247/cl imate-emergencies-photos-so-far-this-year/
Pupils are familiar with the 12 permaculture principles.	Science – Unit 4 Global Warming	Learning Outcomes:  Principles:	What are 12 permaculture principles? <a href="https://permacultureprinciples.com/principles/">https://permacultureprinciples.com/principles/</a>
		<ol> <li>Observe &amp; interact</li> <li>Catch and store energy</li> <li>Obtain and yield</li> <li>Apply self-regulation and accept feedback</li> <li>Use and value renewable resources &amp; service</li> <li>Produce no waste</li> <li>Design from pattern to design</li> </ol>	Let's see: <a href="https://www.youtube.com/watch?v=0mwRAf3z9ag">https://www.youtube.com/watch?v=0mwRAf3z9ag</a> Examine:

8. Integrate rather than segregate	Observe and instruct
9. Use small and slow solutions	Contribution and of the contribution of the co
10. Use and value diversity	The met value of the control of the
11. Use edges and value the marginal	Use smill and solve solutions  Disc and value reservable resources and ervices
12. Creatively use& respond to change	Integrate order than segregate  Doign from potterns to details

## **7 Mindsets and Viewpoints**

End of Year 6 Outcomes	<u>Learning</u> Opportunities/	Learning Task/ Learning Activity	Resource Link
<u>outcomes</u>	Subject Links		
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)	Science – Unit 4 Global Warming	Brainstorm: Alternative renewable energy sources	https://www.npr.org/2020/05/21/860307097/climate-mindset
Pupils begin to identify the viewpoints which have influenced their own mindset, and which influence society. They are given	Science – Unit 4 Global Warming	What are the benefits of solar panels in our school?	

opportunities to think		
critically about these.		

## **8 Feeling and Behaviours**

End of Year 6 Outcomes	Learning Opportunities/ Subject Links	Learning Task/ Learning Activity	Resource Link
Pupils can talk about their feelings about the climate crisis and about their own future	Science – Unit 4 Global Warming	Consulting each other to ease the anxiety of each other with the help of their experiences on climate change.	
Pupils are familiar with a range of methods people use to cope with anxiety about climate change including by taking collective action	Climate Strike Day 7 <sup>th</sup> October		
Pupils begin to understand that awareness of the problem does not always lead to action and begin to explore some of the reasons why.	Science – Unit 4 Global Warming	Act It Out: Pupils act a play that they have written about their feelings on the possible future.	



Upcycled battery eating monster, Turkey

#### **Further resources**

For further useful resources each of the participating schools has chosen some of their favourite websites to do with climate action and climate justice in the four countries participating in the project, please see the links below:-

### **England**

Eco Schools <a href="https://www.eco-schools.org.uk/">https://www.eco-schools.org.uk/</a> A popular organisation offering support for schools in reducing their environmental impact

Energy Heroes <a href="https://energy-heroes.org.uk/">https://energy-heroes.org.uk/</a> Support for schools in integrating action to reduce carbon emissions into the Maths curriculum

Learning through Landscapes <a href="https://ltl.org.uk/">https://ltl.org.uk/</a> Lots of help and support for schools in outdoor learning

**Leeds DEC** <u>https://leedsdec.org.uk/</u> Resources and training linked to the Climate Curriculum developed in this project

Let's Go Zero https://letsgozero.org/ A campaigning website with the aspiration for schools to become carbon zero by 2030

National Education Nature Park <a href="https://www.nhm.ac.uk/about-us/national-impact/national-education-nature-park-and-climate-action-awards-scheme.html">https://www.nhm.ac.uk/about-us/national-impact/national-education-nature-park-and-climate-action-awards-scheme.html</a>
Resources and support for integrating climate and biodiversity learning across the curriculum

Oxfam <a href="https://www.oxfam.org.uk/education/classroom-resources/">https://www.oxfam.org.uk/education/classroom-resources/</a> Resources on impacts and solutions for climate action across the world.

**Practical Action** https://practicalaction.org/schools/ STEM and DT learning relating to worldwide climate solutions.

**Global Dimension** <a href="https://globaldimension.org.uk/resources/inspiring-climate-resources/">https://globaldimension.org.uk/resources/inspiring-climate-resources/</a> A website gathering together a wide range of resource providing organisations – can be searched for climate.

Transform our world https://www.transform-our-world.org/home Resources and links to climate action in schools

#### **Ireland**

- Green Schools <a href="https://greenschoolsireland.org/resources/climate-action-teacher-resource/">https://greenschoolsireland.org/resources/climate-action-teacher-resource/</a> has a vast array of resources and projects for both primary and secondary schools. Some of their projects include. Safe routes to school, Let's fix fashion!, Water Ambassador programme, Investigate Forests. There are also 79 pages of resources including quizzes and teacher training webinars. Further details can be found below
- **ECO-UNESCO** <a href="https://ecounesco.ie/youth-climate-justice/youth-climate-justice/resources-climate-justice/">https://ecounesco.ie/youth-climate-justice/youth-climate-justice/youth-climate-justice/resources-climate-justice/</a> supports young people in climate action and climate justice. They have great resources, articles, book recommendations, short films and spoken word, lots of TED talks and youtube videos
- Trocaire <a href="https://www.trocaire.org/our-work/educate/primary/primary-resources/games/">https://www.trocaire.org/our-work/educate/primary/primary-resources/games/</a> has some wonderful games and interactive activities for exploring themes such as conflict, refugees, climate change and the SDGs. Highly recommended. The Tree of Justice explores issues in Palestine, Somalia and Syria. Pathways to Peace, Harvest for the Future and Human Rights Defenders are great games for problem solving in the real world and there are also opportunities to explore global justice issues through Art.
- **Friends of the Earth** <a href="https://www.friendsoftheearth.ie/">https://www.friendsoftheearth.ie/</a> has lots of information about campaigns for climate justice and climate action. It keeps you up to date on news and events at Irish and international level.
- Climate change.ie <a href="http://www.climatechange.ie/">http://www.climatechange.ie/</a> has been developed as Ireland's one-stop source of information on climate change with the most up to date and credible sources of information, both at national and international level. Probably more suited to teachers who want to keep themselves informed about recent scientific research. Lots of great reports, videos and talks.

### Germany

Deutsche Webseiten zum Thema Klima, Klimawandel, Umweltschutz - German websites about climate, climate change, environmental protection -

http://www.fit-fuer-den-klimawandel.de/downloads-fuer-schulen-und-waldbesitzer/schulen/

https://bildungsserver.berlin-brandenburg.de/lernarchiv-grundschule-klimaschu

https://ed.spiegel.de/unterrichtsmaterial/eis-in-gefahr-unterrichtseinheit-zum-thema-klimawandel-fuer-die-grundschule

https://eduki.com/de/suchergebnisse?query=klimawandel

https://eduki.com/de/unterricht/647/erdkunde/umwelt-ressourcen/umwelt-klimaschutz

https://eduki.com/de/unterricht/705/ethik/nachhaltigkeit

https://klimabildung.org/grundschule/

https://materialwiese.de/2012/11/kostenlos-klimawandel-in-der-grundschule.html

https://naturwissenschaften.bildung-rp.de/fileadmin/ migrated/content uploads/gs klima lehrer.pdf

https://shop.sdw.de/wald-und-klima-grundschule

https://www.bildungsserver.de/unterrichtsmaterial-zum-klimawandel-716-de.html

https://www.bmuv.de/themen/bildung-beteiligung/bildungsmaterialien/bildungsmaterialien-grundschule

https://www.bne-portal.de/bne/de/news/klima-lernmaterialien.html

https://www.carlsen.de/schule/buecher-zum-thema-umweltschutz

https://www.doodleteacherblog.de/post/umweltprojekte-schule

https://www.fussabdruck.de/fussabdrucktest/#/start/index/

https://www.greenpeace.de/ueber-uns/umweltbildung/bildungsmaterialien

https://www.greenpeace.de/ueber-uns/umweltbildung/klimawandel-klimaschutz-grundschule

https://www.klimanet.baden-wuerttemberg.de/ideen-und-aktionen-fur-den-unterricht

https://www.klimaschutz-

niedersachsen.de/ downloads/SonstigeDokumente/Klimaschutzbroschuere Grundschulen Kopiervorlagen Arbeitsblaetter.pdf?m=1622184440&

https://www.lernbiene.de/blog/klimawandel-im-unterricht/

https://www.planet-schule.de/schwerpunkt/knietzsche-der-kleinste-philosoph-der-welt/knietzsche-und-das-klima-film-100.html

https://www.sue-nrw.de/klima-auf-dem-teller/

https://www.umwelt-im-unterricht.de/themen/klima/themenseite-klima

https://www.zdf.de/kinder/loewenzahn/umwelt-trick-oekologischer-fussabdruck-100.html

https://www.zdf.de/kinder/logo/es-klimawandel-100.html

https://www.zdf.de/kinder/logo/themenseite-klima-klimawandel-100.html

https://www.zeitfuerdieschule.de/content/uploads/2021/11/1121-ZEIT-ZfdS-Sek1-Klimawandel.pdf

### Turkey

http://mufredat.meb.gov.tr/ProgramDetay.aspx?PID=1143

Climate Change Curriculum and Environmental Education (years 7 and 8) The Ministry of National Education of Türkiye <a href="https://egitimkolektifi.com/okulunuzda-iklim-degisikligini-ogretmek-icin-7-fikir/">https://egitimkolektifi.com/okulunuzda-iklim-degisikligini-ogretmek-icin-7-fikir/</a>

https://www.iklimin.org/en/hibe-projeleri/

https://iklimtema.org/



Tree planting in Antalya, Turkey



# Project website https://www.climatechange-education.org/



### Project partners:

Aplerbecker Grundscule <a href="https://aplerbecker-grundschule.de/index.php/home">https://aplerbecker-grundschule.de/index.php/home</a>

Akdeniz Yukselis <a href="https://www.aykokullari.com/">https://www.aykokullari.com/</a>

SERGED <a href="https://en.serged.org/">https://en.serged.org/</a>

Our Lady Queen of the Apostles <a href="https://www.clonburrisns.ie/">https://www.clonburrisns.ie/</a>

Moor Allerton Hall Primary <a href="https://moorallertonhall.leeds.sch.uk/leeds/primary/moorallertonhall">https://moorallertonhall.leeds.sch.uk/leeds/primary/moorallertonhall</a> Leeds DEC <a href="https://leedsdec.org.uk/">https://leedsdec.org.uk/</a>

















Erasmus +KA201-2020-1-UK01-KA201-079274

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