



Key Stage 3
Resource Pack



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# Carbon Ruins: at a glance

## **Introducing Carbon Ruins**

Carbon Ruins is an exhibition, set in the year 2050 when we have reached zero carbon. The idea is to select an object from today that would be displayed in the Carbon Ruins exhibition; representing the change that must have happened to reach net zero carbon emissions.

We are excited to share this idea with schools, and have put together these resources to support you to take part in Carbon Ruins, Manchester.

## **Background to Carbon Ruins**

Carbon Ruins was originally developed at Lund University in Sweden. You can find out about the original project as well as the subsequent versions that have been produced as an outreach activity and for COP26 via the 'Climaginaries' website.

The Carbon Ruins exhibition in Lund displayed objects that had been selected by academics, researchers, scientists, business people, and policy makers. You can watch their film <a href="here">here</a> to find out more about some of the objects that were chosen and the stories of change that they told.

## **About Carbon Ruins, Manchester**

What makes Carbon Ruins, Manchester particularly special is that it's happening here, in a museum! Carbon Ruins is all about how museums work – how they select objects, tell stories, and create experiences – that's what makes this a really exciting and important piece of work.

Not only does it offer a uniquely creative and hopeful way of approaching climate change, but it also helps to shift the focus away from individual actions (and the huge burden of responsibility and guilt that tends to follow) towards large scale collective action and systemic change.

## The Carbon Ruins, Manchester exhibition

To celebrate all of the submissions that we receive, Manchester Museum will produce an online exhibition each summer.

Will also be reviewing the submissions to select 12 objects to feature in a physical exhibition at Manchester Museum, due to open in time for the summer holidays and running for at least 6 months in the museum's Research Gallery.

## **Important information**

Please note that we welcome Key Stage 2, 3 and 4 submissions from any school and that all submissions will be featured in the Carbon Ruins, Manchester online exhibition.



However, only Manchester schools will be considered for the Carbon Ruins, Manchester competition.

Please also note that we are looking for submissions from groups, rather than individuals. You may want to work with your class, a whole year group, an eco team or an after-school group; it's up to you. However, we aren't able to accept submissions from individual pupils; an important part of Carbon Ruins is that it's a collective and collaborative activity.

## Important dates:

Please refer to the Important Dates webpage for a timeline



# How to use this resource pack

This pack has been put together to help you to participate in the Carbon Ruins, Manchester programme on your own terms.

It's up to you how much time you spend on Carbon Ruins; you can spend as little as a few hours going through the process, but we would recommend splitting this over a few sessions to get the best out of your pupils.

We have put together a detailed breakdown of the 4 step process below: here you will find a more descriptive explanation of the process and a series of activities, resources and links to support you through each step. However, we have also produced a Quick Lesson Plan and accompanying Powerpoint presentation that will take you through the process in a couple of hours (see <a href="Key Stage 3 Resources">Key Stage 3 Resources</a> page).

Through the resource pack you'll find links to resources that we've created to support you to work through the 4 steps. Please note that for each resource you will find a link to download either a pdf or word format. We have made available the word documents so that you can edit and adjust the documents to meet your own needs.

You will find a summary of curriculum links on pages 21-22 that you may find useful in planning your approach. While Carbon Ruins can be delivered as part of a specific curriculum subject, it can also be approached as a cross-curricular topic, or even as a fun activity at the end of term.

# Carbon Ruins: 4 step process

#### 1: Frame

Learning about climate change and introducing the task.

#### 2: Imagine

Its 2050 and we've reached net zero. What is the world like? What has changed?

#### 3: Curate

Select an object that represents the change that has happened, and tell its story.

#### 4: Submit

Submit your object using the online form



# Step 1: Frame

Learning about climate change and introducing the task.

## A. Learning about Climate Change

#### **Purpose**

Providing a basic understanding of key concepts that will be needed to participate in Carbon Ruins, Manchester.

#### What?

Before you start, it is useful for the group to have a basic understanding of the causes of climate change and its impacts. To distinguish between the carbon dioxide produced naturally and that produced by humans, the carbon cycle is also useful to address. This will help the group to understand what net zero means, namely: that the amount of carbon dioxide produced by humans is balanced out by the amount of carbon dioxide that is removed. It is also important that the group understands what sustainability means and are able to distinguish between the sustainable and unsustainable use of resources. The group should be able to answer the following questions:

What are the causes of climate change?

What are greenhouse gases?

How do humans produce carbon dioxide?

How is carbon dioxide removed from the atmosphere?

What is net zero?

What is global warming?

What are the impacts of climate change?

What sustainability mean?

#### Resources

BBC Bitesize <u>The Causes of Climate Change</u> covers the basics of greenhouse gases, the carbon cycle, global warming, and the causes and impacts of climate change.

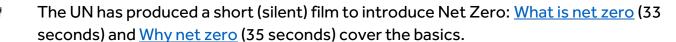
For lower KS3 the BBC's Regenerators – Teachers' video collection is a great place to find engaging resources, such as the <u>Back Chat</u> short film messages from the future (the <u>Video from Fatima</u> is particularly useful for setting the scene).

<u>Climate Science in a Nutshell #5: Where Does Carbon Dioxide Come From</u> is a short film (2 minutes 49) produced by Utah Education Network covering all the basics of the causes of climate change. This is part of a series of <u>Climate Science in a Nutshell</u> short films.

The Science Museum's <u>What is Climate Change and What Causes it</u> is a short film (2 minutes 10), part of a <u>Climate Change Video Series</u>, introducing key concepts and terms related to climate change.

A short (1 minute 14) animated film explaining Net Zero from TED talks.





The <u>Carbon Cycle Caper</u> from the Science Museum Group is an activity, with film, teacher pack and student guidance, introduces the carbon cycle by getting students to play out the process themselves.

Britannica Kids is a useful place to find a good <u>definition of sustainability</u>.

<u>Sustainability explained through animation</u>, produced by RealEyes, is a short (2 minutes) film that sets out the care instructions for our planet in simple terms.

A brief introduction to sustainable actions is covered in the <u>6Rs of sustainability</u> whiteboard explainer film (2 minutes).

We have produced a **Sustainability Worksheet** [pdf / word] with a simple activity to help the class understand the difference between sustainable and unsustainable actions and how these relate to earth's resources.

BBC Bitesize <u>Climate Change Guides for 11-14s</u> contains links to a range of ageappropriate resources for exploring climate change.

#### Take it further

The WWF <u>Introduction to Climate Change</u> provides a range of curriculum-linked resources, presentations and teacher guides to support you to introduce the topic.

Learning through Landscapes has created a resource to help you to <u>Demonstrate the Greenhouse Effect</u> using a glass jar.

The Eden Project's <u>Climate Response - Doers, Shoppers, Learners, Shouters</u> lesson plan supports young people to respond confidently to the climate emergency.

UNESCO has put together a huge bank of <u>Resources for Educators</u> to support learning about each of the 15 Sustainable Development Goals. Each section links through to resources for different levels. Goal 11: <u>Sustainable Cities and Communities</u>, Goal 12: <u>Responsible Consumption and Production</u>, Goal 13: <u>Climate Action</u>, Goal 14: <u>Life Below Water</u>, and Goal 15: <u>Life on Land</u> are particularly relevant.

Oxfam has produced a teacher guide to support learning about <u>The Human Impacts of Climate Change</u>.

Learning Through Landscapes introduces how greenhouse gases cause global warming using an interactive Climate Change Dodgeball game.

Transform Our World has produced a <u>Climate Chaos Response Toolkit</u> including slides with a brief overview of climate change and its impacts, as well as individual and school actions.

Thoughtbox offers a range of lesson plans and resources for specific year groups in their <u>Climate Change Curriculum</u> and also their <u>Climate Change Curriculum</u> explores earth care, people care and self care. Note that login is required but you can sign up for free.



## B. Introducing the Fossil Era

#### **Purpose**

The Fossil Era is a useful way to encourage the group to think about our changing relationship with fossil fuels over time. It also sets the scene for their task.

#### What?

We are currently living in the Fossil Era. The fossil era started in 1849 and ends in 2050. It is divided into three periods: the Great Expansion (1849-1972), the Fossil Fear Years (1973-2015) and the Transition Years (2015-2050). Over this time, our relationship with fossil fuels changed dramatically.

Starting in 1850 the Great Expansion is the time when we started to dig up more and more fossil fuels. But by 1972, people started to question our reliance on fossil fuels. During the Fossil Fear Years there was also more and more evidence that burning fossil fuels was causing climate change. Only in 2015 when the UK signed the Paris Agreement, did our journey towards a fossil free society begin. The Transition Years were not always easy and as well as many species going extinct, disputes erupted as new mines were opened to supply the materials needed for renewable energy. People had to give up on old habits, but most people felt that their lives improved in the long run.

#### Resources

Read through the information on the <u>Carbon Ruins</u>, <u>Manchester site</u> to introduce the three periods of the Fossil Era and use the **Fossil Era timeline** [pdf] to talk through some of the key moments shown on the diagram.

Using the **Blank Fossil Era timeline** [pdf], ask the class to add some of the important dates that they think should be included in the three phases of the Fossil Era. We've put together a list of **Fossil Era Key Dates** [pdf / word] for you to use as a starting point, or you may want the class to carry out their own online research and discuss what they already know. Note that for future dates, you may find that there are targets for achieving particular changes, or the class may want to suggest their own.

#### Take it further

Split the class into small groups and, using the **Blank Fossil Era timeline** [pdf] and the list of **Fossil Era Key Dates** [pdf / word], ask each group to compile a timeline focusing on one of the following themes (or your own).

- Population
- Carbon emissions and use of fossil fuels
- Renewable energy
- Inventions and discoveries
- Scientific evidence of climate change and environmental impacts

Ask groups to share their timelines: are there any patterns or trends that the class can identify that link events across the themes?



A useful source of key dates is the BBC article: <u>A Brief History of Climate Change</u>

## C. Introducing the task

#### **Purpose**

Providing the group with the scenario and instructions for the task they will be completing.

#### What?

The year is 2050 and you are the curator of an exhibition, Carbon Ruins. The exhibition celebrates our achievement of net zero emissions and contains objects from the Fossil Era; telling the story of how they fell out of use or were replaced by something else.

Your task is to select an object from today that represents the change that has happened by 2050, and to create a label that tells the story of how that change has happened.

#### Resources

<u>Carbon Ruins: An exhibition of the Fossil Age</u> is a short film (3 minutes) that introduces the Carbon Ruins exhibition produced at Lund University, also offering some examples of objects (note that this starts at 39 seconds as the introduction is in Swedish!). This is particularly suitable for lower KS3 pupils.

<u>Welcome to the Fossil Museum: Beyond the Fossil Era</u> is another short film (2 minutes) also about the Carbon Ruins exhibition at Lund, providing examples but perhaps more suitable for upper KS3.



# Step 2: Imagine

Its 2050 and we've reached net zero carbon. What is the world like? What has changed?

## A. Future thinking

#### **Purpose**

Supporting the group to imagine the future and what **their** world will be like in 2050, when we have reached net zero carbon and learned to live more sustainably.

#### What?

The year 2050 is 27 years away and your class may struggle to imagine this far ahead. To help them to think about the future, you may find the following questions useful:

- How old will you be in 2050?
- Do you know anyone that age?
- Can you ask them about the changes they've seen in their lifetime?
- What do you hope the world will be like in the year 2050?

#### Resources

Our **Me in 2050** [pdf / word] sheet may be useful to help pupils to think about the future and what their world may be like in 2050. Ask pupils to respond to the prompts and then draw a picture of themselves in the year 2050, capturing what they think their lives will be like.

Use the **My Transition Years** [pdf] sheet to encourage pupils to track some key moments in their lives to date and then to speculate into the future through to 2050.

For a range of ideas to support future thinking, Futurelab have produced a <u>Future Thinking</u> <u>Teacher Pack</u>, full of curriculum-linked ideas and activities.

#### **B. Life in 2050**

#### **Purpose**

Supporting the group to think about what changes may happen by 2050 in order to reach zero carbon as a result of living more sustainably.

#### What?

To help the group to think about some of the changes that may have happened to reach net zero carbon you may find it useful to focus on a particular theme. It is really important that pupils spend some time imagining what they **hope** the future world of 2050 will be like, and then supporting them to build on this by focusing on aspects that relate to a zero carbon, more sustainable world. Such as:

- What we need and buy: What is clothing / furniture / technology like? Where do we buy it from? What is it made of? Who makes it?



- How we get rid of things: What do we do when things break? How do we deal with rubbish and waste? What can be reused, recycled or repurposed?
- Our living world: What animals and plants live with us? What is our relationship with them? Is there more or less green space? What nature is no longer there?
- Energy and power: What energy sources do we use? How does energy get to where it is needed? Where is it generated? How much energy do we use and for what?
- Travel: How do we move around? Where do we go? Why do we travel? How are different modes of transport powered?
- Food and water: What do we eat and drink? Where does it come from? Who grows / makes it? Where do we buy it from? How much do we need?

#### Resources

Our **Life in 2050** [pdf / word] sheets can be used as a starting point for the class to focus on the 6 themes above. Either hand out one or two sheets to small groups, or let them select their preferred themes.

Alternatively our **Life in 2050 Comparisons** [pdf / word] sheets may be helpful if the class is struggling to come up with ideas. These sheets encourage a comparison between now and 2050 for each theme. As above, you may want to give groups specific sheets or let them choose their preferred themes.



# Step 3: Curate

Select an object that represents the change that has happened, and tell its story.

#### What?

There are two routes through the curation step:

**Route 1:** works through the process of curation by focusing on the change that pupils have chosen, with the selection of an object to represent their chosen change taking place at the end. Route 1 will require more time, and is recommended for upper KS3 groups.

**Route 2**: is a quicker way to work through the curation process and is also supported by the Quick Lesson Plan and accompanying Powerpoint presentation, available on the <u>Resources</u> page. This approach moves from Step 2 directly to the selection of an object.

#### **Resources**

<u>Kid Curators</u> is an in-depth project that uses the curation process to support research into a topic, designing a display and producing interpretation.

If you need some inspiration for writing labels, visit our <u>Online Exhibition (via the Carbon Ruins website)</u> or you can find examples of <u>Museum Objects</u> with accompanying stories produced by Carbon Ruins Lund.



#### Route 1:

## A. Changes and how they happen

#### **Purpose**

Supporting groups to select one of their ideas for change, and to start to develop a more detailed understanding of that change and how it happened.

#### What?

Ask groups to select their favourite example of a change that happened by 2050 as a result of reaching net zero carbon and having learned to live more sustainably. To support them to think in more detail about the change they have chosen, you may find it useful to ask the following questions:

#### What changed?

- A product or resource?
- How something was used?
- A behaviour?
- An activity or process?
- A law or rule?
- An organisation?
- An impact or effect?

#### Why did it change?

- People didn't want or need it?
- People stopped doing it?
- People couldn't afford it?
- People realised it was harmful?
- It was unsustainable?
- It was banned?
- It was replaced by something else?
- It went extinct?
- It wasn't a problem anymore?

It's useful for pupils to understand that change doesn't just happen: it's made, often over time, and rarely is it as simple as cause and effect. Change may be driven by one or (usually) a combination of factors:

- Protest: School climate strikes, petitions, civil disruption to demand change
- Innovation: New discoveries, technologies and processes bioplastics, alternative energy sources and materials
- Knowledge: New evidence of climate change impacts, loss of biodiversity; Existing
   Indigenous / non-traditional knowledge
- Policy: Local, national or international laws, rules, and strategies forcing positive change or limiting harmful activities



- New agreements / relationships: Local, national or international collaborations
- Disasters: Natural (floods, wildfires, droughts etc), and man-made (war, financial crisis, fuel crisis etc.)
- Individuals: Influential people Greta Thunburg or David Attenborough; People in power; Inventors, scientists or innovators
- Social action: Collective power boycotting, informing, campaigning, raising awareness, taking action together
- Stories: Fiction help imagine a different future; Biographies and personal stories

The group will need to use a combination of facts and ideas to create a narrative around their chosen change:

Facts: encourage groups to do some research into their chosen change. Are there any key events or developments in history that may have helped to shape their change? Can they find any planned developments or targets related to their change in the coming years?

Ideas: Building on the facts, encourage groups to imagine how their change was achieved by 2050, drawing from some of the drivers mentioned above.

For the change they have chosen, groups may want to discuss the following:

- When did things start changing?
- Which events were important?
- Did a particular person, company, organisation, law, trend or piece of information drive the change?
- Did everyone accept the change straight away?
- If not, how did they change their minds?
- Did things change quickly or slowly?
- Were there unexpected setbacks or obstacles?
- If so, how were they overcome?

#### Resources

We have produced a **Changes and how they happen** [pdf / word] sheet to help the groups to think in more detail about the process of change and to map it out over time. Ask groups to work through the questions and add to the timeline.

# B. Writing a story

#### **Purpose**

Creating an interesting story to describe their chosen change to visitors.

#### What?

Using their answers to the questions above, groups can start to write a story about their chosen change. Remind them to include dates from the timeline, and to describe any important people or places. They should be as creative and imaginative as they can, but



remind them to support their arguments with facts and to use historical examples for inspiration.

The Story Mountain approach is a helpful tool to create an interesting story:

- Opening: Set the scene by introducing the setting in the Fossil Era. What was life like before the change?
- Build-up: Describe why the change was needed or happened: how was life unsustainable before the change?
- Turning point: Describe the change that took place how, when and where?
- Resolution: What is life like in 2050 now that the change has happened?

#### Resources

Use the **Story sheet** [pdf / word] to help the groups to write their stories

## C. Selecting your object

#### **Purpose**

Helping groups to select an object to display alongside their story of change.

#### What?

Now it's time for groups to choose an object that represents or symbolises the change that they've chosen. The object should be something that exists today but will no longer be needed, used, or available in 2050 because of the changes we've made to reach zero carbon. The object doesn't need to be the exact thing, although it could be; it may be one single thing that stands for a bigger group of things, or it may represent an idea or issue.

The object will be the 'hook' that attracts the interest of visitors.

You may want to choose something familiar, for example a plastic bag could represent single use plastics and be displayed to tell the story of ocean pollution, how it harmed the environment, and what changes took place to reach clean oceans in 2050. You may also choose something to represent a concept or idea, such as using a toy car to represent all private cars, which would tell the story of how private car ownership was banned so we could reach our zero carbon target in 2050.

## D. Writing your label

#### **Purpose**

Supporting groups to create a label that presents their object and how it represents their chosen change.

#### What?

The first step is for each group to find or create an image of their chosen object: this may be a drawing, a photograph or an image sourced from the internet (note that online images should be credited so make sure that the source of the image is noted down!).



Groups will then need to produce a label that will sit alongside the object. The label has three parts:

- 1. The name of the object
- 2. Factual information about the object, such as:
- Year it was produced / age
- Where it came from / who owned it
- What it's made of / What make or model it is
- 3. The story
- Groups may want to add extra information to their existing stories that introduces the object before moving on to describe the change it represents.

#### **Resources:**

Ask groups to use the **Object poster** [pdf / word] to complete this task.

## E. Deciding which object to submit

#### **Purpose**

Collectively deciding on which object to submit.

#### What?

Because only one object can be submitted per class, you will now need to work out which of the objects to submit. Start by asking each group to put together some information that they can use to pitch their object to the class.

The object pitch should include:

- What is the object?
- What change does it represent?
- What story does it tell?
- Why is this the most important object to have in the exhibition?

You may want to ask just one member of each group to pitch the object, or request that everyone is involved. You may also want to set a time limit.

There are many ways you could go about deciding which object to submit, but some options include:

- A blind vote by the class
- Teacher selects their favourite
- Group voting and feedback

#### Resources

We've created a simple **Pitch Template** [pdf / word] to help groups to formulate their pitch.

To support group voting and feedback as a means of making the final decision, we've produced a **Score sheet** [pdf / word] and a set of **Score cards** [pdf].



#### Route 2:

## A. Selecting an object

#### **Purpose**

Helping groups to select an object to display alongside their story of change.

#### What

Each group should decide on their favourite example of how the world changed by 2050 and start to think about what object might be used in a display to represent that change.

The object will need to be something from the Fossil Era (back in 2023 when they were at school) that tells an interesting story about the change that happened to reach zero carbon and live more sustainably in 2050: something that exists today but will no longer be needed, used, or available in 2050 because of the changes we've made to reach zero carbon.

Note that the object doesn't need to be the exact thing, although it could be; it may be one single thing that stands for a bigger group of things, or it may represent an idea or issue.

Most importantly, the object will be the 'hook' that attracts the interest of visitors.

Groups may want to choose something familiar, for example a plastic bag could represent single use plastics and be displayed to tell the story of ocean pollution, how it harmed the environment, and what changes took place to reach clean oceans in 2050. They may also choose something to represent a concept or idea, such as using a toy car to represent all private cars, which would tell the story of how private car ownership was banned so we could reach our zero carbon target in 2050.

To support them to choose an object to represent their chosen change, you may find it useful to ask the following questions:

### What changed?

- A product or resource?
- How something was used?
- A behaviour?
- An activity or process?
- A law or rule?
- An organisation?
- An impact or effect?

#### Why did it change?

- People didn't want or need it?
- People stopped doing it?
- People couldn't afford it?
- People realised it was harmful?
- It was unsustainable?



- It was banned?
- It was replaced by something else?
- It went extinct?
- It wasn't a problem anymore?

Why doesn't the object exist in 2050?

- Why did we stop using it?
- What was used instead?

Note that groups shouldn't worry too much if they can't think of an object yet or have a couple of ideas. They should still keep on thinking about the change they've chosen when answering the questions: something may come to mind as they work through them. The important thing is to think about what has changed because we've learned to live more sustainably.

#### Resources

We've produced a **Carbon Ruins Manchester Object sheet** [pdf / word] to help groups to work through the curation process for route 2. Print the sheet double sided on A3 and fold into a booklet. Ask groups to complete pages 1 and 2.

## B. Writing a story

## **Purpose**

Creating an interesting story to explain the relevance of their object and how it relates to their chosen change.

#### What

Now that they've selected an object and thought about why it doesn't exist in 2050, why we stopped using it and what we used instead, groups need to put together a story for their object label that will tell museum visitors more about what happened.

The Story Mountain approach is a helpful tool to create an interesting story:

- Opening: Set the scene by introducing your object and explaining its role and relevance in the Fossil Era.
- Build-up: Describe what happened during the Fossil Era that meant this object became less common.
- Turning point: What change happened that means the object doesn't exist anymore?
- Resolution: What is life like in 2050 now we don't have the object anymore?

#### Resources

Page 3 of the **Carbon Ruins Manchester Object sheet** [pdf / word] provides a useful template for groups to structure their story using the story mountain approach.



## C. Writing the label

#### **Purpose**

Supporting groups to create a label that presents their object and how it represents their chosen change.

#### What?

The first step is for each group to find or create an image of their chosen object: this may be a drawing, a photograph or an image sourced from the internet (note that online images should be credited so make sure that the source of the image is noted down!).

Groups will then need to produce a label that will sit alongside the object. The label has three parts:

- 4. The name of the object
- 5. Factual information about the object, such as:
- Year it was produced / age
- Where it came from / who owned it
- What it's made of / What make or model it is
- 6. The story
- Groups may want to add extra information to their existing stories that introduces the object before moving on to describe the change it represents.

#### **Resources:**

Ask groups to use the **Object poster** [pdf / word] to complete this task.

## D. Deciding which object to submit

#### **Purpose**

Collectively deciding on which object to submit.

#### What?

Because only one object can be submitted per class, you will now need to work out which of the objects to submit. Start by asking each group to put together some information that they can use to pitch their object to the class.

The object pitch should include:

- What is the object?
- What change does it represent?
- What story does it tell?
- Why is this the most important object to have in the exhibition?

You may want to ask just one member of each group to pitch the object, or request that everyone is involved. You may also want to set a time limit.



- There are many ways you could go about deciding which object to submit, but some options include:
  - A blind vote by the class
  - Teacher selects their favourite
  - Group voting and feedback

#### Resources

Page 4 of the **Carbon Ruins Manchester Object sheet** [pdf / word] provides a template for groups to use to structure their pitch.

To support group voting and feedback as a means of making the final decision, we've produced a **Score sheet** [pdf / word] and a set of **Score cards** [pdf].



# Step 4: Submit

Submit your object using the online form

#### **Purpose**

By submitting your object, you will automatically have it featured in the Carbon Ruins, Manchester Online Exhibition!

Manchester Schools will also be entered into the Carbon Ruins Competition: the top 12 submissions will each be installed in your school by Manchester Museum. Later in the summer term, all of the winning objects will be brought together to create a real Carbon Ruins, Manchester exhibition at Manchester Museum!

#### What

To submit your object, go to the <u>Carbon Ruins</u>, <u>Manchester site submission page</u>.

You will be asked to enter the following information:

- Lead teacher name and email address
- School name and post code
- Year group and group name for the submission
- Your object: a short description
- Story (we suggest 150-200 words as a guide): A description of what your object represents and the story it tells about our journey towards a more sustainable way of living



# **Curriculum Links for Key Stage 3**

	Curriculum Area	Step
English	<ul> <li>Write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences.</li> <li>Use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas</li> <li>Are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate</li> </ul>	3. Curate
Science	<ul> <li>Working scientifically - attitudes, methods, risks</li> <li>Biology: Relationships in ecosystems: how organisms affect, and are affected by, their environment, including the accumulation of toxic materials</li> <li>Chemistry: Earth &amp; Atmosphere - Earth as a source of limited resources and the efficacy of recycling; the composition of the atmosphere; the production of carbon dioxide by human activity and the impact on climate</li> <li>Physics: Energy: Calculation of fuel uses and costs in the domestic context; Matter - Physical changes</li> </ul>	1. Frame 2. Imagine
History	extend and deepen their chronologically secure knowledge and understanding of British, local and world history, so that it provides a well-informed context for wider learning; identify significant events, make connections, draw contrasts, and analyse trends within periods and over long arcs of time; use historical terms and concepts in increasingly sophisticated ways; pursue historically valid enquiries including some they have framed themselves, and create relevant, structured and evidentially supported accounts in response; understand how different types of historical sources are used rigorously to make historical claims and discern how and why contrasting arguments and interpretations of the past have been constructed.	1. Frame 2. Imagine
	<ul> <li>Pupils should be taught about:</li> <li>Ideas, political power, industry and empire: Britain, 1745-190</li> <li>Challenges for Britain, Europe and the wider world 1901 to the present day</li> <li>A local history study</li> <li>The study of an aspect or theme in British history that consolidates and extends pupils' chronological knowledge from before 1066</li> </ul>	



	Curriculum Area	Step
Geography	<ul> <li>Physical geography relating to: geological timescales and plate tectonics; rocks, weathering and soils; weather and climate, including the change in climate from the Ice Age to the present.</li> <li>Human geography relating to: population and urbanization, international development, economic activity and the use of natural resources</li> <li>Understand how human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on the effective functioning of natural systems</li> </ul>	1. Frame 2. Imagin
Citizenship	<ul> <li>Develop understanding of democracy, government and the rights and responsibilities of citizens use and apply their knowledge and understanding whilst developing skills to research and interrogate evidence, debate and evaluate viewpoints, present reasoned arguments and take informed action</li> <li>The development of the political system of democratic government in the United Kingdom, including the roles of citizens</li> <li>The roles played by public institutions and voluntary groups in society, and the ways in which citizens work together to improve their communities, including opportunities to participate in school-based activities</li> </ul>	2. Imagin 3. Curate
D&T	<ul> <li>Analyse the work of past and present professionals and others to develop and broaden their understanding</li> <li>Investigate new and emerging technologies</li> <li>Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists</li> <li>Cooking &amp; Nutrition</li> <li>Understand the source, seasonality and characteristics of a broad range of ingredients.</li> </ul>	2. Imagin 3. Curate
E	<ul> <li>Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability</li> <li>Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.</li> </ul>	1. Frame 3. Curate