



22 April

Earth Day Lesson Plan

What a Dump!

Year 5

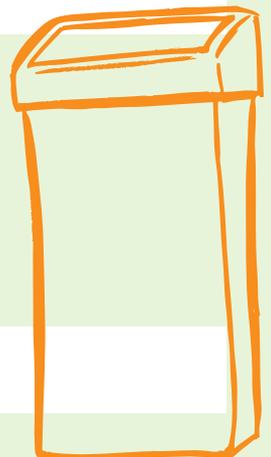
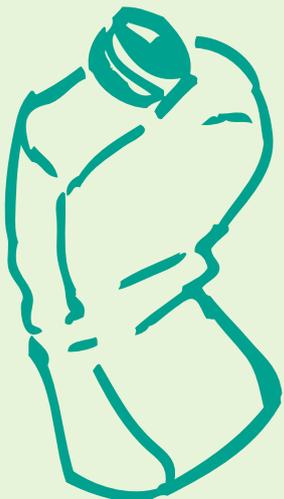
– This pack contains 2, ready to use 1 hr lesson plans.

Key Inquiry Question:
What affect does recycling have on the planet?

- What is the Great Eastern Garbage Patch?
- What is the most common form of rubbish there?
- What plastics does my local authority recycle?

Possible Culminating Activities:

- Create a flowchart explaining how the rubbish comes to be in the Eastern Garbage Patch.
- Write a persuasive letter to your local authority about recycling plastic.



Science

National Curriculum Objectives addressed in this unit:

Key Stage 2**Sc1 Scientific enquiry****Knowledge, skills and understanding****Ideas and evidence in science**

1. Pupils should be taught:
 - a. That science is about thinking creatively to try to explain how living and non-living things work, and to establish links between causes and effects [for example, Jenner's vaccination work].

Sc2 Life processes and living things**Life processes**

- a. That life processes common to humans and other animals include nutrition, movement, growth and reproduction
- b. That life processes common to plants include growth, nutrition and reproduction
- c. To make links between life processes in familiar animals and plants and the environment in which they are found.

Living things in their environment

5. Pupils should be taught:
 - a. About ways in which living things and the environment need protection.

Adaptation

- b. About the different plants and animals found in different habitats
- c. How plants and animals in two different habitats are suited to their environment.

Feeding Relationships

- a. To use food chains to show feeding relationships in a habitat.

Grouping and classifying materials

1. Pupils should be taught:
 - a. To compare everyday materials and objects on the basis of their material properties, including hardness, strength, flexibility and magnetic behavior, and to relate these properties to everyday uses of the materials.

Changing materials

2. Pupils should be taught to:
 - a. To describe changes that occur when materials are mixed
 - b. To describe changes that occur when materials are heated or cooled.

English

Key Stage 2

En3 Writing

Knowledge, skills and understanding

Composition

1. Pupils should be taught to:
 - a. Choose form and content to suit a particular purpose [for example, notes to read or organise thinking, plans for action, poetry for pleasure]
 - b. Broaden their vocabulary and use it in inventive ways
 - c. Use language and style that are appropriate to the reader
 - d. Use and adapt the features of a form of writing, drawing on their reading
 - e. Use features of layout, presentation and organisation effectively.

Punctuation

3. Pupils should be taught to use punctuation marks correctly in their writing, including full stops, question and exclamation marks, commas, inverted commas, and apostrophes to mark possession and omission.

Handwriting and presentation

5. Pupils should be taught to:
 - a. Write legibly in both joined and printed styles with increasing fluency and speed
 - b. Use different forms of handwriting for different purposes [for example, print for labelling maps or diagrams, a clear, neat hand for finished presented work, a faster script for notes].

Citizenship

Key Stage 2

Knowledge, skills and understanding

Developing confidence and responsibility and making the most of their abilities

1. Pupils should be taught:
 - a. To talk and write about their opinions, and explain their views, on issues that affect themselves and society.
 - c. To face new challenges positively by collecting information, looking for help, making responsible choices, and taking action.

Preparing to play an active role as citizens

2. Pupils should be taught:
 - a. To research, discuss and debate topical issues, problems and events.

Geography

Key Stage 2

Knowledge, skills and understanding

Geographical enquiry and skills

1. In undertaking geographical enquiry, pupils should be taught to:
 - a. Ask geographical questions [for example, 'What is this landscape like?', 'What do I think about it?']
 - b. Collect and record evidence [for example, by carrying out a survey of shop functions and showing them on a graph]
 - c. Analyse evidence and draw conclusions [for example, by comparing population data for two localities]
 - d. Identify and explain different views that people, including themselves, hold about topical geographical issues [for example, views about plans to build an hotel in an overseas locality]
 - e. Communicate in ways appropriate to the task and audience [for example, by writing to a newspaper about a local issue, using email to exchange information about the locality with another school].
2. In developing geographical skills, pupils should be taught:
 - a. To use appropriate geographical vocabulary [for example, temperature, transport, industry]
 - d. To use secondary sources of information, including aerial photographs [for example, stories, information texts, the internet, satellite images, photographs, videos] decision-making skills [for example, deciding what measures are needed to improve safety in a local street].

Knowledge and understanding of places

3. Pupils should be taught:
 - a. To identify and describe what places are like [for example, in terms of weather, jobs]
 - b. The location of places and environments they study and other significant places and environments [for example, places and environments in the news]
 - c. To describe where places are [for example, in which region/country the places are, whether they are near rivers or hills, what the nearest towns or cities are]
 - e. To identify how and why places change [for example, through the closure of shops or building of new houses, through conservation projects] and how they may change in the future [for example, through an increase in traffic or an influx of tourists]
 - f. To describe and explain how and why places are similar to and different from other places in the same country and elsewhere in the world [for example, comparing a village with a part of a city in the same country]
 - g. To recognise how places fit within a wider geographical context [for example, as part of a bigger region or country] and are interdependent [for example, through the supply of goods, movements of people].

Lesson	1hr
Objectives	<ul style="list-style-type: none"> – To know about the Eastern Garbage Patch – To identify plastic as the main cause of this pollution
Activities	<p>Introduction</p> <p>Show A picture of the world.</p> <p>Ask Where do you think the biggest rubbish dump in the world is? Take children’s suggestions and possibly plot on the map.</p> <p>Ask What type of garbage do you think there is most of in the biggest garbage dump? Why?</p> <p>If the children haven’t already identified the Eastern Garbage Patch, show them where it is on the map. Ask: does it shock you that the biggest garbage dump is in the ocean?</p> <p>Show youtube video http://www.youtube.com/watch?v=uLrVCl4N67M&feature=related</p> <p>Activity Let’s take a step back to figure out how it all happens. Give each child or pairs the worksheet. It has information about the Garbage Patch that is not in order. The children must put the information in order and draw a labelled diagram to explain the information (see resources below). Children could create their own hanging ‘mobile’ flow charts to be displayed in the classroom if this is more appropriate. Or these could just be flowcharts to be completed on paper and put into books.</p> <p>Plenary How does this make you feel? What do think about plastic now? You could show this video on youtube – the language is quite complicated but the meaning should get through. http://www.youtube.com/watch?v=HEg7qgVNMPQ&feature=related</p>
Resources	<ul style="list-style-type: none"> – Picture/image of the globe – Internet: Youtube video see link in lesson introduction – Flowchart information enlarged to A3 for pairs
Assessment	<p>I can identify where the Eastern Garbage Patch is.</p> <p>I can say what is the most common form of rubbish.</p>

Lesson	1hr
Objectives	<ul style="list-style-type: none"> – To know that plastic can be recycled a number of times – To identify types of plastics recycled by their local authority – To write a persuasive letter to the local council
Activities	<p>Introduction</p> <p>Go over briefly the flow chart created by the class.</p> <p>Ask How can this enormous problem be solved? (Recycling plastic)</p> <p>Ask How many times do you think plastic can be recycled?</p> <p>Say It can be recycled indefinitely.</p> <p>Ask Which country do you think is best at recycling their plastic?</p> <p>Show youtube video http://www.youtube.com/watch?v=QtHi6ewEiD8.</p> <p>It is actually estimated that Mumbai recycles over 80% of it's plastic, this is done in the slums!</p> <p>Show A recycling sack filled with plastic containers and bottles. Examine the label on the front to find out what plastics their borough recycles. Have children make a list of the types of plastic that can recycled. Go through the plastics in the bag and put back the ones that can be recycled and keep the ones that can't. Examine these for the 'recyclable' label. Of the plastics that your borough does not recycle, how many are actually recyclable? (In my borough, it's loads!)</p> <p>Activity</p> <p>Children are to write a persuasive letter to their local council demanding that plastics should be recycled citing the Easter Garbage Patch as a major reason. Discuss persuasive, formal language and formal letter layout. You may want to have your local member's name for the children to write to.</p> <p>Plenary</p> <p>Show the Youtube video again, ask children how they are going to change their ways to make sure this problem gets smaller rather than bigger.</p>
Resources	<ul style="list-style-type: none"> – Recycling sack filled with variety of plastic containers (Could get children to collect these for homework previous week)
Assessment	<p>I can identify plastics that can be recycled by my local authority.</p> <p>I can write a persuasive letter.</p>

Teacher Copy
in order

- Plastics thrown away can end up in the ocean.
- When in the ocean the plastic begins to photo degrade. This means the plastic breaks up into smaller and smaller pieces of plastic. It never goes away!
- The ocean currents move the plastic which eventually either washes up on beaches or it ends up in a gyre.
- The North Pacific Gyre is in the Pacific ocean. Water circulates in a clockwise slow spiral. There is hardly any wind and there are very few islands for rubbish to wash up on so it stays in the gyre.
- The plastic that gets trapped in the North Pacific Gyre breaks down into smaller pieces where fish and other animals like birds mistake it for plankton and krill, their food, and eat it.
- It has been estimated over one million sea-birds and one thousand marine mammals and sea turtles are killed each year by eating plastic or being tangled in rubbish.

Information taken from the Greenpeace website:

<http://www.greenpeace.org/international/campaigns/oceans/pollution/trash-vortex#>

Class Copy

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What can your school do for Healthy Planet?

Adopt land and earn a grant

As well as making small changes to contribute to a healthier planet, your children might want to do more. By adopting a hectare of endangered land, your class will be protecting it for generations to come.

Choose, adopt, dedicate and view your plot online and earn your school a grant.

At Healthy Planet we think you should choose where your donation goes. It doesn't have to be parents putting their hands into their pockets. It's about children making a difference to their lives and the world around them.

Green fundraising to adopt land

Cash for cans

children can collect aluminium cans that can be returned for cash.

A car boot sale

children will learn the benefits of reusing books, clothes and toys whilst raising money towards their hectare of land. Contact property@healthyplanet.org for help with finding a free venue.

Old mobile phones

we will help your school make money from old phones through companies willing to swap cash for older models. www.healthyplanet.valuerecycling.com

At work recycling

children can ask their parents to bring home empty ink cartridges from work that can be exchanged for up to £3 each.

A spring clean

children can bring in old clothes and shoes to be donated to children and families in developing countries and in return for cash.

By participating in any of the activities listed, your children will begin to live the process of reducing, reusing and recycling.

Raise GBP £180 and see how your cake gets cut

- 1 GBP £79.78 goes to the park where your school adopted a plot
- 2 GBP £20.44 goes to Healthy Planet's brilliant ideas factory
- 3 GBP £79.78 goes to your children's choice: back to your school, or back to 1 and 2





Working with the



Geographical Association

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Published by Healthy Planet

Healthy Planet is a charity set up to inspire, encourage and support people around the world and helps you to make a positive & measurable difference.

www.healthyplanet.org/earthday