



22 April

Earth Day Lesson Plan

What a Disaster!

Year 3

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

Key Inquiry Question:
How can we stay safe in extreme weather?

- What is carbon dioxide?
- How does it influence weather and global warming?
- What are high and low pressure systems?
- How do these tell us the weather?

Possible Culminating Activities:

- Create a brochure for other children in the school/parents about severe weather and how to stay safe.



National Curriculum Objectives addressed in this unit:

Geography

Key Stage 1

Knowledge, skills and understanding

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]
- d. To explain why places are like they are [for example, in terms of weather conditions, local resources, historical development].

Knowledge and understanding of patterns and processes

4. Pupils should be taught to:

- b. Recognise some physical and human processes [for example, river erosion, a factory closure] and explain how these can cause changes in places and environments.

Knowledge and understanding of environmental change and sustainable development

5. Pupils should be taught to:

- a. Recognise how people can improve the environment [for example, by reclaiming derelict land] or damage it [for example, by polluting a river], and how decisions about places and environments affect the future quality of people's lives
- b. Recognise how and why people may seek to manage environments sustainably, and to identify opportunities for their own involvement [for example, taking part in a local conservation project].

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].

Science

Key Stage 1

Sc3 Materials and their properties

Knowledge, skills and understanding

Changing materials

2. Pupils should be taught:
 - b. To describe changes that occur when materials [for example, water, clay, dough] are heated or cooled
 - d. About reversible changes, including dissolving, melting, boiling, condensing, freezing and evaporating
 - g. That burning materials [for example, wood, wax, natural gas] results in the formation of new materials and that this change is not usually reversible.

Lesson

1hr

Objectives

- To know what carbon dioxide is
- To know that carbon dioxide is a major cause of global warming
- To know that it can cause extreme weather
- To identify ways to stay safe in extreme weather conditions

Activities

Introduction

Teacher pretends to begin the lesson and phone rings, which he/she answer.

Acts really shocked and upset, 'What? My holiday has been cancelled due to global warming? What do you mean? This is a disaster!'

Hangs up the phone and asks children what they think the person on the phone means by 'global warming'. Take responses on flipchart.

Global warming has been caused by putting more carbon dioxide into the air.

Ask Does anyone know what carbon dioxide is? Take responses.

Say When we breathe in oxygen our bodies use the oxygen and we breathe out carbon dioxide. It's kind of like used air. Lots of other things create carbon dioxide like animals as well as cars, factories and the electricity we use also creates carbon dioxide when the fossil fuels are burnt to send energy to the power stations where our electricity comes from.

Say Carbon dioxide plays a big part in global warming.

Ask Children to draw different types of weather on their whiteboards. Hold these up.

Say Scientists think that weather patterns are being changed by global warming.

Ask What is weather? (Rain, wind, snow, sunny, etc).

Show A barometer map and say that the weather is caused by different pressure in the air.

- When there is a high pressure system the weather is dry.
- When there is a low pressure system the weather is wet.

Extension When the lines are close together the weather is windy which can make any type of weather more extreme (wet weather – a depression of rain which means loads; hot weather – can create dust storms).

Ask Children to draw on whiteboards what weather system they would see for a heatwave, then a flood.

Activity

In mixed ability groups of two ask children to choose one of these extreme weather conditions and brainstorm what it would be like to experience it, what would the dangers be? What could you do to stay safe? Ask children to create a brochure about how to stay safe in extreme weather conditions.

Note The brochure should be folded into 3:

- Front panel: a title page
- 1st panel: describe the extreme weather including a barometer map
- 2nd panel: how to stay safe

Leave a panel free for the plenary activity

There should be two panels on the back free for extending children, they can choose what they like to put there.

Plenary

Because this lesson is quite heavy and the children need time to finish brochures you may just want them to hold up what they have done so far and discuss ideas.

Resources

- A4 sheet of paper per group of two
- Barometer map showing high and low pressure systems
<http://news.bbc.co.uk/weather/forecast/10209>
- Coloured felt tips and pencils

Assessment

I can say what carbon dioxide is.

I can identify ways to stay safe in a heat wave or a flood.

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| Lesson | 1hr |
| Objectives | <ul style="list-style-type: none">– To know what carbon dioxide is– To know that carbon dioxide is a major cause of global warming– To know that it can cause extreme weather– To identify ways to stay safe extreme weather conditions |
| Activities | <p>Introduction</p> <p>Ask What is carbon dioxide?</p> <p>Ask Is it making the Earth heat up or cool down?</p> <p>Show What type of weather does a high pressure system cause?</p> <p>Ask What type of weather system does a low pressure system cause?</p> <p>Ask What are some of the dangers of a heatwave? How can you stay safe?</p> <p>Ask What are some of the dangers of a flood? How can you stay safe?</p> <p>Say The brochures you are creating are going to be given to each class so that they know about weather and global warming.</p> <p>Activity Allow children more time to complete brochures.</p> <p>Plenary</p> <p>Say We talked about some things that cause more carbon dioxide to go into the air. How many can we come up with? Scribe onto flipchart.</p> <p>Have children complete the back panel of their brochure with the heading: 'How to slow down global warming' where they can write a list of ways to reduce the amount of carbon dioxide they are producing.</p> |
| Resources | <ul style="list-style-type: none">– A4 sheet of paper per group of two– Barometer map showing high and low pressure systems– Coloured felt tips and pencils |
| Assessment | <p>I can say what carbon dioxide is.</p> <p>I can identify ways to stay safe in a heat wave or a flood.</p> |

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