A Toolkit for Schools

March 2009
wwf.org.uk/earthhour/schools
Introducing WWF’s Earth Hour

WWF hopes that one billion people across the world will sign up to WWF’s Earth Hour and switch their lights off for an hour at 8.30pm on Saturday 28 March 2009. This will demonstrate that we all care about people, wildlife and the planet, and that we want world leaders to take action to tackle climate change.

What’s WWF’s Earth Hour all about?

In December 2009, leaders from 192 countries will meet at the United Nations’ climate summit in Copenhagen to decide how we tackle climate change. Climate change is the most serious problem we face – changing weather patterns, warming seas and melting ice are devastating for both people and nature.

It is still possible to avoid the worst impacts of climate change – but we must take urgent global action if we are to safeguard the natural world. It’s vital that we get an effective international agreement at Copenhagen. Average global temperatures must remain less than 2°C above pre-industrial levels if we are going to avoid irreversible and devastating changes in the planet’s natural systems.

WWF’s Earth Hour 2009 marks the launch of our biggest campaign yet – the Global Deal Campaign. The campaign will strive to ensure that we get the best possible deal in Copenhagen – a global deal that will protect the people and wildlife of this planet.

What’s this got to do with schools?

WWF believes that schools have an important role to play in leading and championing action on climate change. It’s the young people in our schools today who will live through the worst – or best – effects of the action we take now on climate change. It’s also today’s students who will be tomorrow’s citizens and decision-makers: we need to ensure they have the skills and knowledge to make wise choices about the future of our planet.

We urge you to register your school’s support at wwf.org.uk/earthhour/schools so that world leaders can see how much your school cares about climate change. You can also encourage pupils to take part on 28 March by switching off and marking the event at home. (See also the section ‘Look beyond the school gates’.)

How can you get involved?

To support schools in connecting with Earth Hour, WWF has produced a range of resources for schools. These include:

- a climate change information pack for teachers containing background information on climate change
- the WWF Earth Hour 2009 film
- this Schools WWF’s Earth Hour toolkit, which contains:
  - an assembly/introductory activity with accompanying PowerPoint containing a photoset
  - ideas for a 60-minute, ‘Hour for the Earth’ activity
  - classroom activities
  - WWF Earth Hour challenges
  - a set of climate change games

All can be found at wwf.org.uk/earthhour/schools

This toolkit is designed to:

- encourage involvement in WWF’s Earth Hour 2009
- improve understanding of climate change
- encourage people to take action on climate change by changing the way we live – e.g. by saving energy and reducing consumption.

WWF’s Earth Hour takes place on a Saturday but most schools will be organising events and activities that will take place during the school week. This toolkit has therefore been designed to provide a series of activities you can use in the weeks leading up to WWF’s Earth Hour or which you can condense to create your own Earth Hour – 60 minutes of school or class-based climate change activity.

Why will so many people take part in WWF’s Earth Hour 2009?

- It’s an opportunity to unite and make a bold statement to show that we’re all concerned about climate change.
- It’s an opportunity to convince world leaders that it is possible to take positive action!
- It’s an opportunity to show that we care about the world – its natural environments, its people and its wildlife.
Introducing WWF’s Earth Hour

Structure of the toolkit
The toolkit takes pupils through the issues in the following sequence:
• What is WWF’s Earth Hour 2009? (Assembly – film and PowerPoint)
• What do we need to know about climate change? (Activity 1)
• How can we persuade people to take action to tackle climate change? (Activity 2)
• What’s going to happen at the United Nations Climate Change Summit in Copenhagen in December 2009? (Activity 3)
• WWF’s Earth Hour Challenge (take-home activity)

Make your own WWF’s Earth Hour film
WWF would like to collect as much feedback and as many films and photos from schools as possible.
If you are keen to make your own film, you could start by looking at the narration in WWF’s Earth Hour films, analysing the messaging and text. For example, statements such as “I try to be environmentally aware”, “I try not to be wasteful”, and “I try to do the right thing” lends themselves to “analysis and explain” type activities. Students could use this as a framework to create their own version, rewriting the original or creating content that expands on a certain aspect. They could also include content to publicise their own Earth Hour event or to record what happened at their event.
When planning the school’s own film about their event, ask students to think about:
• Where would be the best place to get footage of their own switch-off, or a local switch-off?
• What images do they want to include?
• What key messages do they want to include?
• Some of WWF’s Earth Hour films use celebrities to enhance the appeal. Could students find a willing local celebrity to contribute to their event?
• How could they share their work? Might the local newspaper, radio or TV news be interested? Or could they share via the internet?
Share your films with WWF by emailing oneplanetschools@wwf.org.uk. We have a prize of £250 for the best film submitted to WWF.

Inclusion and participation
Involving the children in the creation, organisation and running of activities is an important part of this event and provides a wealth of educational opportunities. As well as building their understanding of climate change, the event provides opportunities for pupils to show their creativity as they come up with their own ideas, and to develop their practical skills through the planning and delivery of their ideas.
Pupils might be asked to brainstorm their ideas for activities in two stages:
1. Imagine that there are no restrictions on what we do.
2. Think about these criteria – fun, safety, time, cost, environmentally friendly, inclusive.
Pupils could use the ‘who, what, when, why, where, why, how’ format to develop their initial ideas (see Activity 2).
Possible activities might include: night walks, treasure hunts in the dark, wildlife walks, shadow puppets, astronomy, pre-midnight feasts, candle making, night photography, concerts, community singing, film shows, story-telling. Sky lanterns would provide a spectacular event but pupils might decide that they’re unsustainable. Visit: www.skylanterns.com

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©James Alcock
School challenge
Climate change is one of the most serious threats facing the people and wildlife of this planet. We all have a role to play in reducing this threat. If people say they'll do something (orally or in writing) they're more likely to do it. So we're asking your pupils to take part in a challenge!

- At the back of this toolkit you’ll find a challenge sheet where your pupils can record the actions they’ve taken in support of WWF’s Earth Hour to reduce their energy use. We’ve filled in a few of the boxes to start them off.
- You could also make a written pledge as a school, family or group of friends. Your pledge might include promises about how you’re going to mark WWF’s Earth Hour and/or promises about the ways in which you’re going to join the battle against climate change by changing the way you live.

People are also encouraged to join in if they know others are making an effort as well. So we’re asking you and your pupils to tell someone what you’re going to do for WWF’s Earth Hour 2009, and to ask someone to tell you what they’re going to do. This can all be recorded on the challenge sheet.

Completed challenge sheets can be sent to WWF: post them to Liz Rossall, Schools and Community Relations Team, WWF-UK, Panda House, Weyside Park, Godalming, Surrey GU7 1XR. Please ensure you give us a contact name and number, plus a postal and email address and we will provide a school certificate to commemorate all schools that take part. A downloadable pupil certificate will also be available from wwf.org.uk/earthhour/schools.

Look beyond the school gates
Every school, every business, every family and every person has a vitally important role to play in helping to make WWF’s Earth Hour 2009 a massive worldwide event. We need to tell people about WWF’s Earth Hour and we need to create the sorts of events that will encourage more and more people to join in.

WWF’s Earth Hour site provides a toolkit at wwf.org.uk/earthhour/schools

Pupils can also play an important role in the battle against climate change by taking home important messages and making positive changes.

Pupils could create their own WWF’s Earth Hour leaflets for homes and/or local businesses. These might include key messages and lists of practical suggestions.

Other things you can do...
- Sign up to WWF’s Earth Hour 2009 at wwf.org.uk/earthhour/schools
- Share information about events at your school by emailing the details to oneplanetschools@wwf.org.uk
- Create a Climate Change Action Report with details of pledges and action at your school. Publish and update your report on your school website, make sure that lots of other people know what you’re doing by contacting the local media and cluster group schools. Send your report to WWF at oneplanetschools@wwf.org.uk

WWF Earth Hour 2007 – the first event involved 2.2 million people in Sydney, Australia.

WWF Earth Hour 2008 – involved 50 million people across 35 countries.

WWF Earth Hour 2009 – aims to reach one billion people in 1,000 cities to illustrate the support of world communities for action on climate change.
**Assembly/Introductory activity**

### What’s it all about?

- **Age range:** 7-16
- **Curriculum links:** English, Science, PSHE/Citizenship
- **Time needed:** 20 minutes
- **Group size:** Year group or whole school (or class/tutor group)
- **Setting:** School assembly hall (or classroom)
- **Key vocabulary:** Climate change, global warming, greenhouse gas emissions
- **Resources needed:**
  - A digital projector (optional).
  - Pupil volunteers to read out short texts (see Resource sheets 1 and 2) as photographs are displayed.
  - Flipchart and marker pen or interactive white board.
  - Access to the photographs provided in the PowerPoint.
  - Copy of the short story on Resource sheet 3.

### Learning outcomes

- To understand the causes and effects of climate change.
- To understand some of the action that can be taken to combat climate change.
- To commit to taking action.

### Procedure

- **One by one, display the photographs on the WWF PowerPoint provided using the digital projector. The texts on Resource sheets 1 and 2 should be read out as the images are shown. Alternatively, view the PowerPoint at [www.kidscall.info/downloads/KidsCall-ClimateChange.ppt](http://www.kidscall.info/downloads/KidsCall-ClimateChange.ppt).**

- **Tell the pupils that you are now going to read out a short story (see Resource sheet 3). Pupils should put up their hands each time they think energy has been used in the story.**

- **Confirm that every time we switch on a light, use a computer, watch TV or travel by motorised transport we are creating carbon dioxide and contributing to climate change.**

- **Say that we can all contribute to reducing climate change by cutting the amount of energy we use every day at home and at school. But we need to make sure decision-makers know we want them to take action too. Now introduce pupils to WWF’s Earth Hour by showing the film at [wwf.org.uk/earthhour/schools](http://wwf.org.uk/earthhour/schools). Key messages include:**

  - Climate change is one of the most serious threats facing the people and wildlife of this planet.

  - On Saturday 28 March 2009 at 8.30 pm, people around the world will turn off their lights for one hour – WWF’s Earth Hour – to show their support for global action to tackle climate change.
Ideas for a 60-minute activity

A 60-minute WWF’s Earth Hour event might include some of the following activities:

• Film, PowerPoint and discussion. (20 minutes)
• Switch off the lights, computers, heating, etc for at least 60 minutes.
• Group activities – Each group needs a large sheet of paper. Ask them to complete and give brief feedback on one or more of the following tasks. (20 minutes)
  • List what you consider to be the key facts about climate change.
  • Draw a diagram to show how these things are linked – a polar bear, a coral reef, a packed lunch and a television.
  • Draw and describe an ‘I don’t care about climate change’ cartoon character – think about what they do/don’t do/say.
  • List what you consider to be the most important things that everyone should do to tackle climate change.
  • How would you persuade more people to take part in WWF’s Earth Hour or take other action that will help to tackle climate change?
  • Make a climate change pledge – a list of the actions against climate change that you promise to take.
  • What is your message for the world leaders who’ll be meeting at the UN Climate Change Summit in Copenhagen?
• What was there? Climate change game – see page 20. (20 minutes)
• Drama – create a climate change tableau based on one or more of the quotes from WWF’s climate change witnesses (see Resource sheet 4). Pupils create a ‘frozen’ scene based on the quote – a character ‘comes to life’ and explains more about the situation when the teacher gives them a pre-arranged signal. (20 minutes)
**Activity 1**


<table>
<thead>
<tr>
<th>Age range:</th>
<th>7-16</th>
</tr>
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<tbody>
<tr>
<td>Curriculum links:</td>
<td>English, Science, PSHE/Citizenship</td>
</tr>
<tr>
<td>Time needed:</td>
<td>Part 1: 45 minutes. Part 2: 60 minutes</td>
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<tr>
<td>Group size:</td>
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<tr>
<td>Setting:</td>
<td>Indoors</td>
</tr>
<tr>
<td>Key vocabulary:</td>
<td>Carbon footprint, climate change,</td>
</tr>
<tr>
<td></td>
<td>ecological footprint, global warming,</td>
</tr>
<tr>
<td></td>
<td>greenhouse gas emissions</td>
</tr>
<tr>
<td>Resources needed:</td>
<td>Internet access</td>
</tr>
<tr>
<td></td>
<td>Resource sheet 5 – Who, what, where,</td>
</tr>
<tr>
<td></td>
<td>when, why, how research cards</td>
</tr>
</tbody>
</table>

**Examples of success criteria**

- 30 more pupils walking to school
- More pupils able to list five things they can do to tackle climate change
- No lights left on in empty classrooms
- Fewer items of lost property
- Less food waste from school dinners

- Ask pupils to create a simple way of recording their success criteria, e.g.

<table>
<thead>
<tr>
<th>Before WWF’s Earth Hour</th>
<th>Success criteria</th>
<th>After WWF’s Earth Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of pupils walking to school each day: 160</td>
<td>Reduce school CO2 emissions from transport</td>
<td>Average number of pupils walking to school each day: 180</td>
</tr>
<tr>
<td>Average number of items in lost property:</td>
<td>Reduce school CO2 emissions from waste</td>
<td></td>
</tr>
<tr>
<td>Weekly electricity consumption:</td>
<td>Reduce school CO2 emissions from energy</td>
<td>Weekly electricity consumption:</td>
</tr>
</tbody>
</table>

**Learning outcomes**

- To understand the causes and effects of climate change.
- To understand some of the actions that can be taken to combat climate change.

**Procedure**

**Part 1**

- Watch WWF’s Earth Hour film at [wwf.org.uk/earthhour/schools](http://wwf.org.uk/earthhour/schools).
- Whole class: Explain that the “6Ws” (also known as the 5Ws and one H) are used in journalism to research and report factual information. Explain that the person asking the 6W questions has to think about the sorts of information they want. For example, ask pupils to think about some of the ways that 6Ws could be used to gather or report information about WWF’s Earth Hour film. Brainstorm some of the different purposes of each W:
  - Who – made the film/is the target audience?
  - What – is it about/are the key messages/does the event hope to achieve?
  - Where – did it start/are these events taking place?
  - When – did it happen before/is it happening in 2009?
  - Why – did people hold the first WWF’s Earth Hour/is it happening/switch off for 60 minutes?
  - How – might this event make a difference/can we get involved/find out more?
- Explain that you’re going to watch the film again. Ask the pupils to use the 6Ws to create a brief report about the film.
- Group work: Explain that the class is going to hold a WWF’s Earth Hour event – this could be organised as an internal class event where groups view the work of other groups or as a year group/whole school/community event. Think about what they hope to achieve from their event.
- Ask them to select two or three objectives for the event e.g. better understanding of the causes of climate change; greater awareness of things you can do to tackle climate change; school-based action.
- Ask pupils to create a series of success criteria – ways to measure how far they’ve gone towards achieving each of their objectives.

**Part 2**

- Each group is going to use the 6W approach to research and report back on the suitability of a selection of climate change resources that could be used as part of their WWF’s Earth Hour event.
- The materials should be divided so that each group is responsible for a different category of resources, e.g. websites, games, films, etc. Ask the groups to:
  - Use the Research Cards (Resource sheet 5) to find resources for their event. They should use the 6Ws to help in the selection of resources and to explain their choices.
  - Suggest other things that they might include in their event – speeches, music, games.
- Plenary (whole class): Discuss the pupils’ work.

**Extension**

Organise your WWF’s Earth Hour event! Visit WWF’s Earth Hour website to sign up and receive information about taking part in Earth Hour: [wwf.org.uk/earthhour/schools](http://wwf.org.uk/earthhour/schools)

**Evaluation**

Work with a partner to think about the following:

Objectives are…
Success criteria are…
The 6Ws are…
The best resource was……………because……………
The best resource for people who know less about climate change than me was……………because……………
The best resource for people who know more about climate change than me was……………because……………
**Activity 2**

**The science of persuasion**

<table>
<thead>
<tr>
<th>Age range:</th>
<th>7-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum links:</td>
<td>English, PSHE/Citizenship</td>
</tr>
<tr>
<td>Time needed:</td>
<td>60 minutes</td>
</tr>
<tr>
<td>Group size:</td>
<td>2-4</td>
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<td>Setting:</td>
<td>Indoors</td>
</tr>
<tr>
<td>Key vocabulary:</td>
<td>Influence, key messages, media, persuasion</td>
</tr>
<tr>
<td>Resources needed:</td>
<td>Large sheets of paper, copies of Resource sheet 6</td>
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</table>

**Learning outcomes**

- To understand some of the key messages about tackling climate change.
- To think about the factors that influence people.

**Preparation**

Watch WWF's Earth Hour films at wwf.org.uk/earthhour/schools

**Procedure**

- Whole class: Ask pupils to imagine the following scenario: “You work as a partner in your own media company. You are hoping to win the contract to provide the publicity for WWF’s Earth Hour event. Your task is to organise a campaign that will explain climate change and persuade as many people as possible to get involved in WWF’s Earth Hour events.”

- Brainstorm:
  - What do people need to know about climate change?
  - What do people need to know about WWF’s Earth Hour?
  - What are the best ways to communicate our message?
  - What sort of events would attract lots of people?
  - How are we going to persuade people to get involved?
  - How will we know if we’ve been successful?

- Group work: Ask each group to create an outline plan for their campaign based on the questions covered in the brainstorming activity. Resource sheet 6 provides the questions, the key messages and details of techniques and information that might be used to persuade people to take part in WWF’s Earth Hour event.

- Individual work: Ask pupils to develop one of their group’s ideas to show what it might look like when it’s finished.

- Whole class plenary: Ask pupils to explain their work and ideas. Discussion: which techniques have you used? Which techniques work on you/don’t work on you? Can you think of an example where you’ve seen that technique in action?

**Extension**

Invite pupils to create finished versions of some of the ideas. They should use these methods to publicise an event for WWF’s Earth Hour at your school. They could contact the local media and cluster group schools to make sure that as many people as possible take part in WWF’s Earth Hour 2009.

**Evaluation**

Working in pairs, pupils consider: What are the most important reasons why people should take action to tackle climate change? Are these reasons clearly stated in any of the persuasive techniques that you’ve used? Have you included the key messages?
Activity 3

The global deal

<table>
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<tr>
<td><strong>Setting:</strong></td>
<td>Indoors</td>
</tr>
<tr>
<td><strong>Key vocabulary:</strong></td>
<td>Ecological footprint, exports, income, imports, proposal</td>
</tr>
<tr>
<td><strong>Resources needed:</strong></td>
<td>Copies of the agenda and role cards on Resource sheets 7 and 8</td>
</tr>
</tbody>
</table>

**Learning outcomes**
- To understand that climate change is a global issue.
- To understand that some countries have done more to cause climate change than others, and that countries are affected by climate change in different ways.

**Preparation**
Watch WWF’s Earth Hour film at wwf.org.uk/earthhour/schools.

**Procedure**
- Whole class: Tell pupils that world leaders will meet in Copenhagen in December 2009 to agree a ‘global deal’ for tackling climate change. The deal must be at a level to keep average global temperature rise below 2°C and to provide sufficient support for developing countries (e.g., technology transfer, trade and investment to pave the way to low-carbon development).
  - Brainstorm: Imagine that we were given an opportunity to tell those leaders what we’re doing to tackle climate change in our school and in our homes – what could we tell them?
  - What more could we do?
- Group work – ask pupils to prepare for a role-play session in which they will represent a different country at the 2009 Climate Change summit in Copenhagen. Each group needs a role card and a copy of the agenda from the resource sheets. They should be given an opportunity to read their role cards and think about climate change and their responsibilities – to their countries and to the planet as a whole.
- Explain who will be taking the role as Chairperson and any rules that will be used to regulate the meeting, e.g., timing, respect for speakers and listeners, interruptions, etc.
- Plenary (whole class): Discuss the meeting. Did your country get what it wanted from the meeting? Did planet Earth get the action it needed? What advice would you give leaders attending the meeting in Copenhagen?

**Extension**
Create a pledge on climate change or create a message that can be sent to the leaders’ meeting in Copenhagen in December 2009.

**Evaluation**
Use a ‘conscience alley’ to explore ideas and feelings. One person could take the role of a world leader who is about to attend the meeting in Copenhagen. The other pupils act as their conscience. This activity could be used to explore a variety of different characters – for example: a leader from a particular country; a person who thinks that efforts to tackle climate change should all be left to governments; a spokesperson for the oil or timber industry.

**How to use a ‘conscience alley’**
1. Pupils should stand in two lines facing each other. There should be an ‘alley’ between the lines.
2. One person volunteers to take on the role of the character making the statement. They stand in the space between the lines of pupils (the alley). They read out one of the statements and then walk slowly along the alley, stopping when someone (their conscience) speaks. They do not reply to their conscience.
3. The other pupils act as this person’s conscience. They speak to them as they come alongside.
4. At the end of their journey through the alley, the person may be invited to respond to their conscience in role.
As the climate changes, storms are becoming more violent and occurring more often. In 1998, Hurricane Mitch was one of the deadliest hurricanes ever recorded in the Atlantic. Here is a view from the air of one of the Bay Islands off the coast of Honduras after Mitch had passed through.

This is a glacier in the Swiss Alps. Global warming is melting glaciers in every part of the world causing sea levels to rise and changing the flow of cold and warm sea currents, thereby affecting weather patterns. This in turn can lead to floods, droughts and shortage of drinking water, causing danger and hardship for millions of people.

The Earth's changing climate is bringing problems around the world. In some places less and less rain means people are facing such bad droughts it's not possible to grow crops. This picture shows lifeless farmland in New South Wales, Australia, where there was a severe drought in 2003.

Other parts of the world are getting too much rain and are suffering from floods, such as in Hunan Province in central China in 2002.

As glaciers melt and water in the seas becomes warmer and expands, sea levels are rising. Small islands, like the Solomon Islands in the Pacific Ocean, could lose large areas of land or even completely disappear under the waves. Large areas of the UK are likely to be threatened by rising sea levels, such as East Anglia, coastal towns and cities, and even London.

The temperature of the Earth is increasing because of waste gases produced by people's activities. This is known as global warming. The most widespread waste gas is carbon dioxide. Much larger amounts of this gas are now being produced by people burning fossil fuels such as coal, oil and gas to produce energy. As the Earth becomes warmer, our climate is changing.

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Glaciers are the Earth’s largest reservoirs of fresh water. This is the Aletsch glacier in the Swiss Alps. This is a glacier in the Swiss Alps. Global warming is melting glaciers in every part of the world causing sea levels to rise and changing the flow of cold and warm sea currents, thereby affecting weather patterns. This in turn can lead to floods, droughts and shortage of drinking water, causing danger and hardship for millions of people.

The Earth’s changing climate is bringing problems around the world. In some countries, millions of people could face worse drought and problems with water supplies. This picture shows lifeless farmland in New South Wales, Australia, where there was a severe drought in 2003.

Other parts of the world, such as North America and parts of Asia, are predicted to receive more rain than they do now and to suffer from floods. This picture shows floods in Hunan Province in central China in 2002.

Sea levels are predicted to rise as the seas become warmer and expand, and as glaciers and ice sheets melt. By 2050, sea level rise is predicted to threaten coastal areas where many large cities have been built, such as Mumbai, New York and Tokyo. Low-lying islands in the Pacific Ocean like the Solomon Islands could lose large areas of land or even completely disappear under the waves.

Human activities are increasing the concentration of waste gases in the atmosphere. This is causing the world to heat up and is known as global warming. The most widespread waste gas is carbon dioxide. Much larger amounts of this gas are now being produced by people burning fossil fuels such as coal, oil and gas to produce energy. As the Earth becomes warmer, the world’s climate is changing.

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Millie’s story

Millie is eight years old. She lives in Godalming. Here’s a story about her getting ready for school.

Millie is woken up by the radio alarm clock – the local radio is playing her favourite song.

It’s cold and dark outside.

She gets up and turns on the light. The house is lovely and warm.

She goes into the bathroom and has a wash, and then she gets dressed. She wears a jumper knitted by her mum but some of her favourite clothes were made in countries far away – her trainers for example. So they had to be transported to this country in a plane.

Millie then goes downstairs and has breakfast – toast and tea.

She goes back upstairs to clean her teeth, and then she picks up her packed lunch and races to the car to be driven to school.
Ideas for a 60-minute activity

Climate witness quotations

“Khar Us lake has evaporated dramatically within the last four to five years. Even small hand-wells have dried up. There were many small ponds around the lake. None of them exist now. This year we have less vegetation and the cattle are very weak.”

Marush Narankhhuu, Mongolia.

“Due to minor embankment breaches and flooding, I lost my first house. Then, in the year 2005, a 900-metre stretch of this embankment on the western side was breached and the entire locality was flooded. This is the second time I lost my house. Now, with great difficulty, I have managed to build a third house.”

Hasan Ali Bandar, India.

“Over the past 20 years it has become increasingly difficult for farmers to predict when the rain would begin. Even when the rains start late they are more erratic, with higher variation than ever before. The rains begin to fall very little and end little or with floods or vice versa. Thus, year in year out, farmers tend to have basically one of two complaints: ‘I harvested less because the rains failed,’ or: ‘My crops did not do well this year because the rains were too much.’”

Augustine Yelfianibe, Ghana.

“When I was young, we never knew anything about malaria. It was very rare for us to hear that anybody had contracted malaria. We do not know how malaria developed around here. I think it must be warmer now for the mosquitoes that spread malaria to survive in our area.”

Joseph Kones, Kenya.

More climate witness stories can be found at the following website: www.panda.org/climatewitness
# Resource Sheet 5

## Who, what, where, when, why, how?

### Research cards

- Stopglobalwarming.org
  - www.stopglobalwarming.org/sgw_features.asp
- wwf.org.uk
- wwf.org.uk/climate
- www.youtube.com/WWFunitedkingdom
- BBC
  - www.bbc.co.uk/bbcfour/documentaries/features/climate-shorts.shtml
- The animals save the planet
  - fartingcow.com/
- One Planet Future
  - www.green.tv/wwf_oneplanetfuture
- Energy: let's save it
  - managenergy.net/kidscorner/animations/ec_cartoon_an.html

### Films

- Climate change
  - www.bbc.co.uk/climate/evidence/greenhouse_effect_img.shtml
- Bloom
  - www.bbc.co.uk/bloom/
- EfficienCity
  - www.greenpeace.org.uk/files/efficienCity/index.html
- Energy house
  - www.open2.net/sciencetechnologynature/worldaroundus/energy_house.html
- Animated guide to climate change
  - news.bbc.co.uk/1/shared/spl/hf/sci_nat/04/climate_change/html/climate.shtml
- Energy saving house
  - www.eonenergy.com/At-Home/Going-Green/Energy-Saving-Advice/Interactive-House/?WT.mc_id=Interactive_House&WT.svl=8

### Animations

- Switch 'em off
  - wwf.moccu.com/game.php
- I'm alright, Jack
  - www.bbc.co.uk/climate/adaptation/jack.shtml
- Climate change
  - www.bbc.co.uk/sn/hottopics/climatechange/climate_challenge/index_1.shtml
- UK energy game
  - news.bbc.co.uk/1/shared/spl/hf/uk/06/electricity_calc/html/1.shtml
- Planet protectors
  - www.ecokids.ca/pub/eco_info/topics/climate/CO2effect/index.cfm
- Selection of games
  - managenergy.net/kidscorner/en/o11/games.html
- Energy hog
  - www.energyhog.org/childrens.htm
- Play it cool
  - www.4million.org.nz/climatechange/understanding/schoolstuff/playitcool/index.php
- Polar bear tracker
  - www.panda.org/about_wwf/where_we_work/europe/what_we_do/arctic/polar_bear/kids_zone/index.cfm

### Games
# Resource Sheet 5

## Who, what, where, when, why, how? cont.

<table>
<thead>
<tr>
<th>Information</th>
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<tbody>
<tr>
<td>Facts and myths</td>
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<tr>
<td>The evidence</td>
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<tr>
<td>Climate change sceptics</td>
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<td><a href="http://www.panda.org/about_wwf/what_we_do/climate_change/problems/cause/climate_sceptics/index.cfm">www.panda.org/about_wwf/what_we_do/climate_change/problems/cause/climate_sceptics/index.cfm</a></td>
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<tr>
<td>Climate change around the world</td>
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<td><a href="http://news.bbc.co.uk/1/hi/in_depth/629/629/6528979.stm">news.bbc.co.uk/1/hi/in_depth/629/629/6528979.stm</a></td>
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<td>Green energy</td>
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<td>E-book</td>
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<tr>
<td><a href="http://www.grida.no/publications/vg/kick/ebook.aspx">www.grida.no/publications/vg/kick/ebook.aspx</a></td>
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<td>Climate change photos</td>
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<td>Climate change photos</td>
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<td><a href="http://www.worldviewofglobalwarming.org/">www.worldviewofglobalwarming.org/</a></td>
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<tr>
<td>Climate change photos</td>
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<tr>
<td>The bigger picture</td>
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<tr>
<td>Climate change in Bangladesh</td>
</tr>
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<td><a href="http://news.bbc.co.uk/1/shared/spl/hi/picture_gallery/08/south_asia_climate_change_in_bangladesh/html/1.stm">news.bbc.co.uk/1/shared/spl/hi/picture_gallery/08/south_asia_climate_change_in_bangladesh/html/1.stm</a></td>
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<td>Coolkids</td>
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<td><a href="http://www.coolkidsforacoolclimate.com/About/AboutIndex.html">www.coolkidsforacoolclimate.com/About/AboutIndex.html</a></td>
</tr>
<tr>
<td>Act on CO2</td>
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<td><a href="http://campaigns.direct.gov.uk/actonco2/home.html">campaigns.direct.gov.uk/actonco2/home.html</a></td>
</tr>
<tr>
<td>European Commission</td>
</tr>
<tr>
<td>Carbon detectives</td>
</tr>
<tr>
<td><a href="http://www.carbondetectives.org.uk/content/home/index.html">www.carbondetectives.org.uk/content/home/index.html</a></td>
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<td>CBBC Newsround</td>
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<td><a href="http://news.bbc.co.uk/cbbcnews/hi/specials/climate_change/default.stm">news.bbc.co.uk/cbbcnews/hi/specials/climate_change/default.stm</a></td>
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<th>Footprint calculators</th>
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<tr>
<td>Carbon calculator</td>
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<tr>
<td><a href="http://actonco2.direct.gov.uk/index.html">actonco2.direct.gov.uk/index.html</a></td>
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<tr>
<td>Ecological footprint calculator</td>
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<tr>
<td><a href="http://footprint.wwf.org.uk">footprint.wwf.org.uk</a></td>
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<tr>
<td>Carbon footprint calculator</td>
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<tr>
<td><a href="http://www.carbonfootprint.com/calculator.aspx">www.carbonfootprint.com/calculator.aspx</a></td>
</tr>
<tr>
<td>School footprint calculator</td>
</tr>
<tr>
<td><a href="http://www.carbondetectives.org.uk/content/home/index.html">www.carbondetectives.org.uk/content/home/index.html</a></td>
</tr>
<tr>
<td>School footprint – quick calculation</td>
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<tr>
<td><a href="http://www.carbondetectives.org.uk/quickcalc">www.carbondetectives.org.uk/quickcalc</a></td>
</tr>
<tr>
<td>Ecological footprints worldwide</td>
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**WWF's Earth Hour: Key messages**

- Climate change is one of the most serious threats facing the people and wildlife of this planet.
- On Saturday 28 March 2009 at 8.30pm, people around the world will switch off their lights for one hour – WWF’s Earth Hour – to show their support for global action to tackle climate change.
- WWF’s Earth Hour aims to reach one billion people in 1,000 cities to illustrate the support of world communities for action on climate change.
- World leaders will meet in Copenhagen in December 2009 to negotiate a deal that could tackle climate change, but they need to hear that we want them to take action too.
- There are creative ways to take part e.g. candlelit dinners, night walks and story-telling parties.
- There are lots of ways to tackle climate change – WWF’s Earth Hour can become part of your daily life.

**Questions to address in outline plan:**

- What do people need to know about climate change?
- What do people need to know about WWF’s Earth Hour?
- What are the best ways to communicate our message?
- What sort of events would attract lots of people?
- How are we going to persuade people to get involved?
- How will we know if we’ve been successful?

**Marketing techniques**

Advertisers use lots of techniques to sell stuff. Here are a few examples of how advertisers try to get our attention and make us want to just buy it.

- **Everything you want to be and more**
  
  Who doesn’t want to be cool, adored or envied?
  
  Advertisements sometimes try to get us to think that our image will change if we buy their products – everyone will think we’re cool.

- **Everyone else has it**
  
  Advertisers know that people don’t like to feel left out.
  
  So they try to convince you that so many people are doing it – and that if you’re not, everyone will notice.

- **If you laugh, it’s good**
  
  Funny adverts make the name of the product stick – so you like it and tell your friends about it.

- **You really need a makeover**
  
  Adverts suggest that you can improve your looks and feel better about yourself if you buy those products.

- **I, _______. (insert celebrity name here), love this stuff!**
  
  Famous actors, musicians, or sports stars talking about how much they love some product – and getting paid lots for doing it.

- **Quick! Before it’s too late!**
  
  Hurry! Buy now! Last chance! Limited time offer!

(Source: www.ibuydifferent.org/powerup/marketing_techniques.asp)

**Weapons of influence**

1. People tend to return a favour.
2. If people say they’ll do something (orally or in writing) they’re more likely to do it.
3. People will do things that they see other people are doing.
4. People will tend to obey authority figures.
5. People are easily persuaded by other people that they like.
6. People will tend to do things if they’re told that they need to act quickly because something is running out – e.g. tickets for the event.

(Source: Dr Robert Cialdini)

**Fundamental needs – sources of happiness**

Psychologists squabble over what those needs are, but usually agree on four:

1. To feel secure – emotionally and materially.
2. To feel part of a community – to give and receive from family, friends and neighbours.
3. To feel competent – that we’re not hopeless at the things we choose to do.
4. To feel autonomous and authentic – in charge of our own destinies and not living behind a mask.

(Source: Oliver James)
Agenda

1. Brief welcome from chairperson – all countries to respond briefly to the report from the UK school about their action to tackle climate change.

2. Ask each country to give brief details about themselves – their main exports, average ecological footprint, levels of poverty and the impact of climate change.

3. Ecological footprint: The planet has 1.8 global hectares available per person. Discussion: What action, if any, needs to be taken?
   • Vote on any proposals from countries.

4. Forests: Forests help to prevent climate change. An area of ancient forest the size of a football pitch is destroyed every two seconds – rainforests could disappear within 40 years.
   • Proposal: Strict limits to forest clearance and timber trade.
   • Vote on proposal.

5. Fossil fuels: CO2 is the most significant greenhouse gas – it is produced when fossil fuels are burned. We must keep the rise in average global temperature below 2°C to avoid catastrophic and irreversible damage. This is possible if we take the right action.
   • Discussion: What action needs to be taken?
   • Vote on any proposals from countries.

6. Global deal: Discussion, proposals and agreement of a global deal which all countries will sign.
   • All countries agree to the following action:

7. Brief statements to media by individual countries.
## Role cards

### Maloceania – Pacific Ocean
**Exports:** food.
**Imports:** oil, technology, clothing.
**Average ecological footprint:** 0.8 global hectares per person.
**Population living below national poverty level:** 21%.
**Energy:** Fossil fuels 99%; Renewable 1%.
**Climate change impact:** country will disappear beneath the sea – 350,000 refugees.
**Remember:** Your country has done very little to cause climate change.

### Bangalia – Asia
**Exports:** food, clothing.
**Imports:** coal, oil, technology.
**Average ecological footprint:** 0.5 global hectares per person.
**Population living below national poverty level:** 49%.
**Energy:** Fossil fuels 99%; Renewable 1%.
**Climate change impact:** flooding – refugees, loss of agriculture, disease.
**Remember:** Your country has done very little to cause climate change.

### Useallia – North America
**Exports:** coal, oil, natural gas, timber, cars, food, technology, clothing.
**Imports:** coal, oil, natural gas, timber, cars, food, technology, clothing.
**Average ecological footprint:** 9.8 global hectares per person.
**Population living below national poverty level:** 12%.
**Energy production:** Fossil fuels 85%; Renewable 15%.
**Climate change impact:** increase in storm damage and flooding.
**Remember:** Your country has been a major source of greenhouse gases. Your people have jobs and a high standard of living – they don’t want to lose this.

### Bramazonia – South America
**Exports:** coal, oil, minerals, timber, food.
**Imports:** cars, food, technology, clothing.
**Average ecological footprint:** 1.8 global hectares per person.
**Population living below national poverty level:** 22%.
**Energy production:** Fossil fuels 95%; Renewable 5%.
**Climate change impact:** increase in storm damage and flooding.
**Remember:** Your country has large areas of rainforest. Timber and food from farms on former rainforest land create wealth.

### Useloadsia – Europe
**Exports:** coal, oil, natural gas, cars, food, technology, clothing.
**Imports:** coal, oil, natural gas, timber, cars, food, technology, clothing.
**Average ecological footprint:** 4.7 global hectares per person.
**Population living below national poverty level:** 14%.
**Energy production:** Fossil fuels 96%; Renewable 4%.
**Climate change impact:** increased storm damage and flooding.
**Remember:** Climate change is the most important threat we face.
Resource Sheet 8
The global deal cont.

Baltovia – Europe
Exports: coal, oil, natural gas, timber, food, cars.
Imports: technology, clothing.
Average ecological footprint: 2.3 global hectares per person.
Population living below national poverty level: 54%.
Energy production: Fossil fuels 99%; Renewable 1%.
Climate change impact: increased storm damage and flooding.
Remember: Your economy is developing. More jobs = less poverty.

Republica – Asia
Exports: coal, natural gas, timber, cars, food, technology, clothing.
Imports: oil, food, technology.
Average ecological footprint: 3.1 global hectares per person.
Population living below national poverty level: 6%.
Energy production: Fossil fuels 98%; Renewable 2%.
Climate change impact: Drought – refugees, loss of food production.
Remember: Your developing economy relies on coal; you are not responsible for the greenhouse gas emissions of the past decades.

Somastia – Africa
Exports: timber, food.
Imports: coal, oil, cars, technology.
Average ecological footprint: 0.2 global hectares per person.
Population living below national poverty level: 54%.
Energy production: Fossil fuels 99%; Renewable 1%.
Climate change impact: drought – refugees, disease and damage to agriculture.
Remember: Your country has done very little to cause climate change. Timber exports are vital to your economy.

Emirastia – Middle East
Exports: oil, natural gas.
Imports: timber, cars, food, technology, clothing.
Average ecological footprint: 2.1 global hectares per person.
Population living below national poverty level: 19%.
Energy production: Fossil fuels 96%; Renewable 4%.
Climate change impact: Drought – loss of food production.
Remember: The country’s wealth comes from fossil fuels – supplies are limited.
Climate change games

You will need the following equipment for each game:

Tea towels, a bag and objects linked to climate change.

Items might include: light bulb, clothes peg, food item, packaging, toy car, electrical item, clothing, plastic bags, paints, cleaning liquids – manufactured items will have an impact on climate change via energy used in their manufacture, transportation, use and waste.

Images might include: polar bears, penguins, icebergs, glaciers, forests, drought, flooding, aircraft, ships, cars, consumer goods, oil wells, rivers, energy efficiency labels.

What was there?

Before you play, look at all the items and images – discuss how they’re linked to climate change.
Then hide a number of items and/or images under the tea towel. Remove the towel to reveal the items for 15 seconds. Replace the towel and ask players to remember what’s there. You might remove each item from under the towel as it’s listed.

Just a minute

Challenge pupils to talk about an item or image for one minute – describing the item, explaining its links to climate change. There can be no deviation, hesitation or repetition – when that happens, another person takes over for the remaining time.

In my bag

One pupil is given a bag containing one of the items or images. The rest of the class have to try and identify the contents of the bag using 10 questions, which can be answered only with a ‘Yes’ or ‘No’.

Dragons’ den

Groups are given an item or image. Their task is to sell their ‘perfect product in the battle against climate change’ to the dragons – played by the rest of the class.
**WWF’s Earth Hour challenge sheet**

Climate change is one of the most serious threats facing the people and wildlife of this planet. We all have a role to play in reducing this threat. If people say they’ll do something (orally or in writing) they’re more likely to do it. So we’re asking you to take part in a challenge!

Below is a diary where you can make a note of what changes you have made to help save energy. We have given you some suggestions to get you started, but try to think of new and exciting ways to save energy in your home.

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
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</thead>
<tbody>
<tr>
<td>Cycled to school</td>
<td>Switched off lights when left the room</td>
<td></td>
<td></td>
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<tr>
<td>Want to recycling bins with bottles</td>
<td>Had a shower instead of a bath</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Switched off computer after using it</td>
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</tbody>
</table>

**Want to do more?**

Tell us how you are going to take part in WWF’s Earth Hour on 28 March.

Working together, we can achieve more, so why not get together with friends and family, or as a school, to make a joint pledge. Write this here:

______________________________

Spread the word! Tell other people about what you are planning to do, and help WWF spread the world about Earth Hour 2009.

How many people have you told about WWF’s Earth Hour? □□□

Now take your completed form back to your teacher. A special downloadable certificate is available for all pupils that take part; ask your teacher for details.

Many thanks for taking part!

**WWF’s Earth Hour – 8.30pm, 28 March 2009.**  [wwf.org.uk/earthhour/schools](http://wwf.org.uk/earthhour/schools)
The mission of WWF is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature by:

• conserving the world's biological diversity ensuring that the use of renewable natural resources is sustainable
• reducing pollution and wasteful consumption.

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