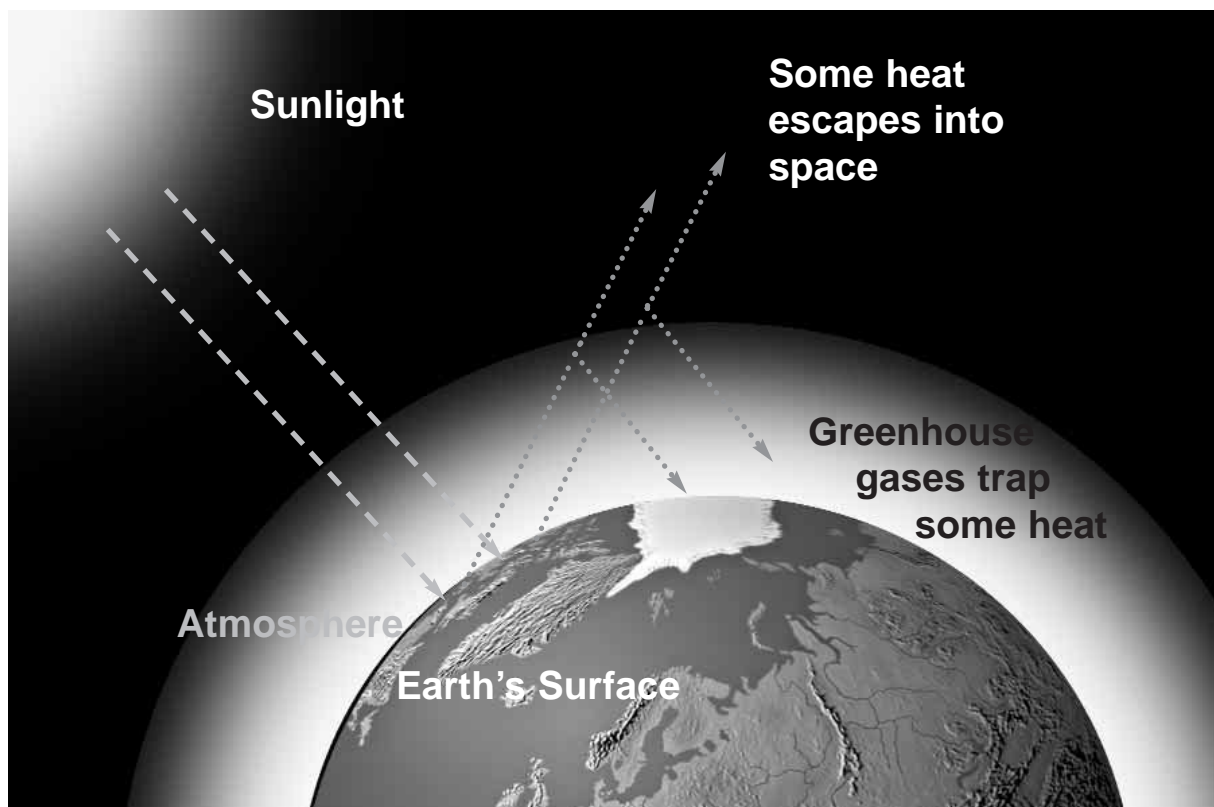


'The Environment' Media, Assessment and Presentation

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Ask someone what they think 'the environment' is all about and they will probably think of issues such as global warming, waste and pollution. But a dictionary definition is: "the surroundings or conditions in which a person, animal, or plant lives or operates." Why do we often associate 'the environment' with crisis and global catastrophe? This Report investigates global warming, which many scientists believe is the greatest environmental crisis facing the world, and how this issue is presented in the media.



GLOBAL WARMING – THE SCIENCE

Before you start examining media reports of global warming, read this simple scientific explanation. Sunlight passes through the atmosphere and warms the surface of our planet. The warmed Earth transmits energy back into space in the form of infra-red radiation. The **greenhouse gases** act like a blanket, trapping some of this infra-red radiation and keeping the heat in. This is called the **natural greenhouse effect**.

Carbon dioxide is one of the main greenhouse gases. Human activity adds carbon dioxide to the atmosphere in many ways – by burning fossil fuels to generate electricity, driving vehicles which emit exhaust gases and cutting down trees which releases carbon and removes forests which absorb carbon dioxide through photosynthesis.

Labels such as the **greenhouse effect** are a helpful way of understanding complex scientific ideas. Unfortunately, they can be misleading. Life as we know it on Planet Earth is only possible because of the conditions created by the greenhouse effect. What scientists are worrying about today is the **enhanced greenhouse effect** which is leading to more heat being trapped and, therefore, to a rise in the Earth's temperature. Scientists using complex computer models now think global warming is causing the polar ice caps to melt, expanding the oceans, and, in turn, this is causing climate change – more flooding, storms and hurricanes in some parts of the world, and more heat-waves and droughts in others.

GLOBAL WARMING – FACT OR THEORY?

Other authors are more cautious and prefer to talk about the **greenhouse theory**. They agree that Earth is warming, but say that the planet's temperature has fluctuated in the past, with several ice ages occurring over a timescale of thousands of years. Even in the relatively short timescale of the last thousand years, Britain has experienced both a medieval warm period when vines grew in the south of England, and a 'little ice age' between the 16th and 19th centuries, when the River Thames regularly froze over in winter. Other people don't think the Earth is getting hotter at all, but they are in the minority and recent evidence seems to confirm the planet is getting warmer.

ASSESSING MEDIA REPORTS

Before starting to read this Report, what did you know about global warming? Where did you get your information from – friends, teachers, parents or stories you have seen in the media?

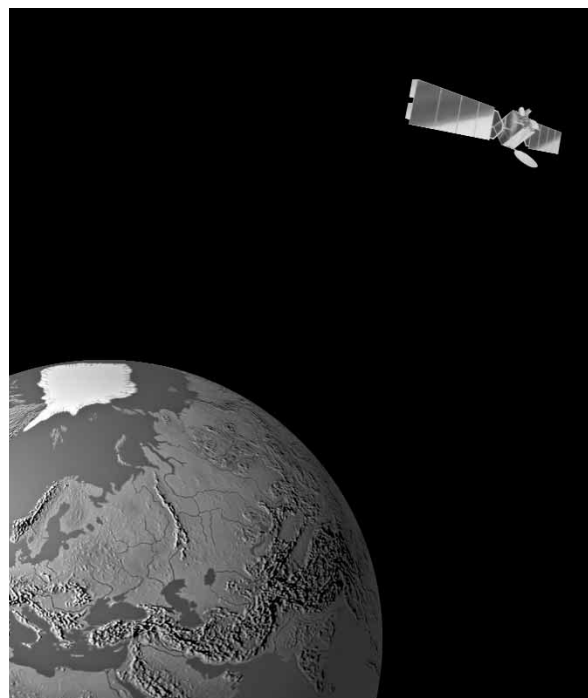
Make a collection of all the media reports about global warming you see in one week and try to answer these questions:

- **Where and when did the story appear – did you read it on the Internet, see it on TV, in a newspaper, heard it on the radio or via another media source?**
- **Does it say who wrote it? Does this matter?**
- **What are the key points of the report?**
- **Who is the intended audience – adults, young people, scientists, politicians or others?**
- **Does it give any scientific explanations or use scientific language?**
- **What is your view of the media report? Do you believe it and why?**

Here are some examples of media reports about global warming to get you started.

REPORT 1

"It's hard to think of many things powerful enough to disrupt life across our entire planet. Huge natural disasters - like earthquakes, erupting volcanoes, or tsunamis (freak tidal waves) - can affect many thousands of people, but their



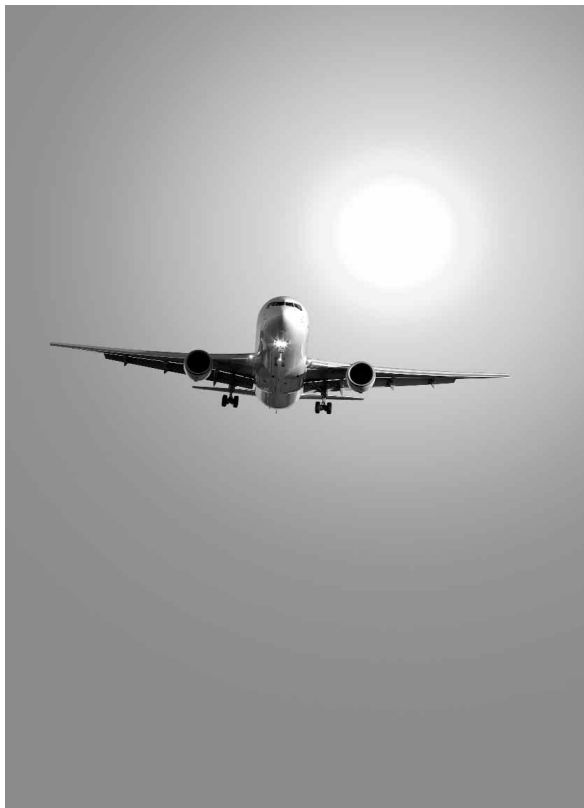
impacts are usually confined to just one region of the world. Terrorist attacks cause worldwide panic and horror, but their effects are usually quite localized. Catastrophic nuclear explosions, like the one that happened at the Chernobyl power plant in the Ukraine in 1986, can spread "fallout" (toxic radioactive debris) across an entire continent - but even they do not affect the whole Earth.

Global warming, which is a gradual rising of Earth's temperature, is different from all these, representing a scale of threat greater than anything humans have faced in recent history. Unless we tackle the problem soon, it could transform the planet we live on, making the climate (Earth's weather patterns) much more erratic, forcing many species into extinction, and making life much harder - especially for people in developing countries."

<http://www.explainthatstuff.com/globalwarmingforkids.html>

REPORT 2

"Half of young children are anxious about the effects of global warming, often losing sleep because of their concern, according to a new report today. A survey of 1,150 youngsters aged between seven and 11 found that one in four blamed politicians for the problems of climate change.



One in seven of those questioned by supermarket giant Somerfield said their own parents were not doing enough to improve the environment. The most feared consequences of global warming included poor health, the possible submergence of entire countries and the welfare of animals.

Most of those polled understood the benefits of recycling, although one in 10 thought the issue was linked to riding a bike. Pete Williams, of Somerfield, said: "Concerns over our environment dominate the media at present and kids are exposed to the hard facts as much as anybody. While many adults may look the other way, this study should show that global warming is not only hurting the children of the future, it's affecting the welfare of kids now. By raising awareness amongst today's young, hopefully we are improving our chances of reaching a solution."

The study marked Somerfield's drive to reduce the eight billion plastic bags wasted by UK households every year."

GMTV

REPORT 3

"The world is likely to experience the warmest year on record in 2007, the UK's Met Office says. An extended warming period, resulting from an El Nino weather event in the Pacific Ocean, will probably push up global temperatures, experts forecast. They say there is a 60% chance that the average surface temperature will match or exceed the current record from 1998.

The scientists also revealed that 2006 saw the highest average temperature in the UK since records began in 1914. The global surface temperature is projected to be 0.54C (0.97F) above the long-term average of 14C (57F), beating the current record of 0.52C (0.94F), which was set in 1998.

The annual projection was compiled by the UK Met Office's Hadley Centre, in conjunction with the University of East Anglia.

El Nino effect

Chris Folland, head of the Hadley Centre's climate variability research, said the forecast was primarily based on two factors. The first was greenhouse gas emissions from human activity, he said. "This is a statistical method; it is a number that represents the heating of the atmosphere."

"Greenhouse gases cause heating, while aerosols cause cooling," Professor Folland told BBC News.

“The other factor which allows us to make a forecast that whether one year is significantly different from the next is the effect of the El Nino.”

El Nino events are marked by the arrival of unusually warm waters off the north-western coast of South America, and are described as the largest influence on the year-to-year variability of the Earth’s climate. This year’s potential to be a record breaker is linked to a moderate strength El Nino already established in the Pacific Ocean. The World Meteorological Organization (WMO) said that it was expected to continue into the first quarter of this year, which would have a knock-on effect.

“There is a big lag between the El Nino and the warming of global temperatures - it takes about four months or perhaps a bit longer,” Professor Folland explained. “We have two methods of forecasting the effect of the El Nino. One is a statistical method based on two patterns of sea surface temperatures in the El Nino region, and the other is a complex mathematical model.”

He said that the forecast was then fine-tuned by looking back over data from the previous 50 years. “We have actually run this forecast three times, updating it every month... and it is completely stable.”

The 60% probability that 2007 would set a new record meant that it “was more likely than not,” he concluded.”

BBC News



PRESENTATION STYLES

When you are working with the Reports in this pack, state clearly what environmental issue you are presenting your conclusions on. It is not helpful if your presentation causes confusion, allowing readers to be unclear whether you are dealing with climate change, waste or pollution for example.

Identify exactly the sources of the material you have considered in coming to your conclusions. Quote clearly the name of the website, newspaper, book etc, and where possible, name the author(s) and the date on which he/she produced the information.

If you read the three stories printed in Assessing Media Reports, you will see that much of this vital information is missing.

Explain why you would consider some of the media items that you have considered reliable and some unreliable. For example, if you are presenting your conclusions on ‘the environmental impact of leisure and tourism’, identify which groups of people involved in the debate are likely to benefit from the expansion of leisure and tourism financially and in other ways. This is called vested interests.

You will need to sort information and fact from opinion. Opinion may not be wrong, and facts may tell only part of the story.

Consider if people have been paid money to create the content of the media reports and who might have paid them?

Consider if any of the authors have reasons other than scientific enquiry to communicate their pieces on the environment.