Human activities: Worksheet 9.6

Evaluating reports

Science writers usually believe what they write, but does that make their reports reliable? It does not. To evaluate reports you must ask these questions:

1. Is it based on evidence – or is it just an opinion?
2. Does the evidence justify the conclusion – or could there be other explanations?
3. Can you be sure it is not biased, incomplete or based on a simplified model?
4. Is the report from a respected scientific organisation or journal?

The reports below come from three different sources. They all relate to the same question – are humans responsible for global warming?

1. Read each report and assess the strength of the evidence it provides.
2. List the questions you would ask to help you to evaluate each report.

***Panorama* current affairs program**

In 2010, respected journalists from *Panorama* investigated the evidence for human-induced climate change. They found that scientists agreed on three certainties: carbon dioxide is a greenhouse gas (it traps more heat than air); the amount of carbon dioxide has risen over the past 100 years; and the climate is changing. However, the scientists who were consulted disagreed on whether this climate change would be manageable or catastrophic.

**A peer-reviewed paper in a respected journal**

A 2013 study in the peer-reviewed journal *Environmental Research Letters* checked 11 944 peer- reviewed papers about climate change that had been published between 1991 and 2011. Of these, 3896 supported the idea that humans were contributing to global warming; 78 disagreed; and 40 expressed uncertainty about it. The remainder did not discuss the issue.

**The NASA website**

In November 2015, NASA scientists reported that human-made carbon dioxide continues to increase above levels not seen in hundreds of thousands of years. The data, which are available on the Internet, came from a new satellite launched in 2014 that measures the amount of carbon dioxide in the atmosphere.