
Extraordinary ice

WORKSHEET A

Recently, in mid-July, a NASA satellite flying over the Arctic Circle detected a piece of ice breaking off the Petermann Glacier in Greenland, and soon afterwards the story was picked up by the media around the world. Why, you might ask, was such an event considered interesting? Well, this was no ordinary chunk of ice. It measured about 120 square kilometres – bigger than many cities.

In the polar regions of the Earth there are many glaciers extending from land into the ocean and it is not uncommon for pieces of them to break off and form icebergs – the process is called *calving* – but it is rare for the icebergs to be so huge.

Such events fuel the worldwide debate about climate change. Are the polar ice caps breaking apart and melting as a result of global warming?

Measured on the basis of average temperatures in different places around the world, it does seem to be the case that the planet is getting warmer. In the northern hemisphere, for example, June 2012 was the warmest month since records began. And it does seem that this is causing the Arctic and Antarctic ice caps to shrink, although so far only slowly. The Petermann Glacier itself is smaller than at any point in the last 150 years.

There is more disagreement, however, about the degree to which climate change is man-made. Are we causing it, or can it be explained by natural climatic changes that occur gradually over time?

We know, for example, that the planet underwent periods of significant warming and cooling millions of years ago, long before human beings even existed.

However, the majority of climate scientists believe that the present warming is due at least partly to human activity – specifically to the way in which modern economies have increased the amount of greenhouse gases, including carbon dioxide, in the Earth's atmosphere as a result of activities such as the burning of fossil fuels in industry and transport.

Extraordinary ice

WORKSHEET B

Exercise 1

Here are some simple definitions for words that appear in the text on Worksheet A. Find the words they refer to and fill in the gaps.

1. **_ _ r _ n _** (verb): to become smaller in size
2. **_ _ l _** (verb): to be changed from solid into liquid
3. **u _ d _ _ g _** (verb): to experience something, especially a process of change
4. **_ _ _ _ i _ f _ _ _** (noun): a fuel such as coal or oil, made from decayed material from animals or plants that lived many thousands of years ago
5. **_ r _ _ u _ _ _ _** (adverb): very slowly; in small stages or amounts
6. **_ a _ - _ a _ _** (adjective): made or caused by people; not existing naturally
7. **_ _ _ _ h _ _ _ _ _ i _ p _ _ _ _** (noun): the half of the Earth that is to the north of the equator
8. **_ _ u _ _** (noun): a large thick piece of something
9. **d _ t _ c _** (verb): to prove that something is present, or happening, using scientific methods
10. **f _ _ l** (verb): to make something increase or become more intense

Extraordinary ice

WORKSHEET C

Exercise 2

One word has been taken out of each line of the text below. How many of the missing words can you remember and replace?

- (1) Recently, in mid-July, a NASA flying over the Arctic Circle detected a
- (2) piece of ice breaking off the Petermann Glacier in, and soon afterwards
- (3) the story was picked up by the media around the. Why, you might ask, was
- (4) such an considered interesting? Well, this was no ordinary chunk of ice. It
- (5) measured about 120 kilometres – bigger than many cities.
- (6) In the polar regions of the Earth there are many extending from land into
- (7) the ocean and it is not uncommon for pieces of them to break and form icebergs –
- (8) the process is called *calving* – it is rare for the icebergs to be so huge.
- (9) Such events fuel the worldwide about climate change. Are the polar ice
- (10) caps breaking apart and melting as result of global warming?
- (11) Measured on the basis of average in different places around the
- (12) world, it does seem to be the case that the planet is getting warmer. the
- (13) northern hemisphere, for example, June 2012 was the warmest since
- (14) records began. And it does seem that this causing the Arctic and Antarctic ice
- (15) caps to shrink, although far only slowly. The Petermann Glacier itself is smaller
- (16) than at any point in the 150 years.
- (17) There is more disagreement, however, about degree to which climate change
- (18) is man-made. Are we it, or can it be explained by natural climatic changes
- (19) that occur gradually over?
- (20) We know, for example, that the planet underwent periods significant warming
- (21) and cooling millions of years ago, long before beings even existed.
- (22) However, the majority of climate scientists believe that the present is
- (23) due at least partly to human – specifically to the way in which modern
- (24) economies have the amount of greenhouse gases, including
- (25) carbon dioxide, in the Earth's as a result of activities such as the
- (26) of fossil fuels in industry and transport.