

About this unit

This unit describes what the British Isles were like 20 000 years ago, during the last ice age, at the maximum extent of glaciation.

Key ideas

- ◆ 20 000 years ago, Earth was in an ice age.
- ◆ It began about 110 000 years ago, and ended about 10 000 years ago – so lasted around 100 000 years. The maximum extent of glaciation was around 20 000 years ago.
- ◆ At that point much of the British Isles was covered by an ice sheet, and the southern parts were tundra.
- ◆ Water levels in the ocean fell because water – that would otherwise return to the ocean in rivers – became locked up in ice on land. As a result, shallower parts of the ocean floor were exposed as land, joining the British Isles to the rest of Europe.
- ◆ When the ice finally melted, water levels rose again. The British Isles were once more cut off from the rest of Europe.
- ◆ People first reached the British Isles early in the ice age, about 40 000 years ago. As it got colder we left. When the ice sheet started to shrink we returned, about 12 000 years ago.

Key vocabulary

ice age, ice sheet, tundra

Skills practised in 'Your turn'

- ◆ Geography skills: q1, define geographical terms; q3, q4, interpret a map
- ◆ Numeracy skills: q1, work out how long the ice age lasted
- ◆ Literacy skills: q3, write a blog, describing a place during the ice age
- ◆ Thinking skills: q3, come up with reasons; q4, list items to take on time travel back to the ice age, and explain the choice

Unit outcomes

By the end of this unit, most students should be able to:

- ◆ explain what an ice age is, and what a tundra environment is like
- ◆ state when the last ice age began, how long it lasted, and when it ended
- ◆ describe the extent of the ice sheet over the British Isles, 20 000 years ago
- ◆ explain why the British Isles were joined to the rest of Europe at that point, and how they were cut off again
- ◆ say how the ice age affected people and animals, in the British Isles

Suggestions for a starter

- 1 Ask: In the British Isles, is there widespread snow and ice anywhere, all year round? Why not? Do you think it has always been like this?
- 2 With books closed, ask: What do you think the British Isles were like, 20 000 years ago? Write words on the board. You can check back at the end of the lesson.

Suggestions for plenaries

Plan plenaries at strategic points throughout the lesson, as well as at the end.

Mid-lesson

- 1 Question 3 of 'Your turn' could be answered as a whole-class exercise.
- 2 Ask: Who can explain *why* water levels fell in the ocean, during the ice age?
Draw out the facts that when snow fell it did not melt, so the rain did not run back to the ocean. In addition, lower temperatures around Earth meant a lower rate of evaporation from the ocean, so there was less precipitation.
- 3 Look at map B. The main ice sheet not extend to southern Europe. Why not? But there are some areas of ice in southern Europe. Why?

End-of-lesson

- 4 Start a big spider map on the board, with some headings in place, to summarise today's lesson. Students call out terms and phrases to add to it.
- 5 If you used starter 1, you can revisit the word list. Which words can be crossed out?
- 6 Ask: What exciting / interesting things did you learn today, that you did not know before?

Further class and homework opportunities

Suggestions 1–3 on page 96 of this book

geog.1 workbook, page 33

geog.1 Kerboodle: see lesson presentation, worksheets, end-of-lesson assessment

Answers for 'Your turn'

- 1 **a** A long-term reduction in the average temperature around Earth, leading to the spread of glaciers.
b A cold region where the ground is permanently deeply frozen. Only the surface thaws in summer, allowing small low plants such as shrubs, mosses, lichens, sedges, and grasses to grow. There are few or no trees, since their roots cannot penetrate the frozen ground. (Note: tundra is a biome, and the frozen ground is called permafrost.)
- 2 100 000 years; around 10 000 years ago.
- 3 **a** Water on land was locked into ice, so it no longer flowed back to the ocean. So water levels in the ocean fell. As a result, the more shallow parts of the ocean floor, between the British Isles and the rest of Europe, were exposed as land.
b Because as the ice age ended, and ice melted, water levels around the British Isles rose again.
c Answers will vary, but may include: our history would be different – we might be part of a different country now, and speak a different language; easier to reach other parts of Europe by road, making travel and trade easier; climate would be at least a bit different as we'd be part of a bigger land mass, with less coast; fewer seaside resorts; London might not exist, since no longer a port.
- 4 **a** Some students may need help about where they are on the map.
b Answers will vary, but all students will need suitable clothing, food, and something to drink. Also a tent – unless they can sleep in the time machine? Sleeping bag? Source of solar power? Snow goggles? Helmet? Boots with a good grip? Skis or snow shoes? A weapon, just in case? Camera/video camera? Something to write on / with? Perhaps the time machine has equipment for sending messages into the future.
c You might want to give students a minimum word count. They could write about the cold, what the landscape looks like, the silence and emptiness, the absence of other people, animals they might see; they might write about their feelings – excitement, or fear, or loneliness.