

Source 2 Three photos of Ötzi the Iceman. The annotations identify some of the experts who investigated his remains and describe what people have learned as a result of their investigations.

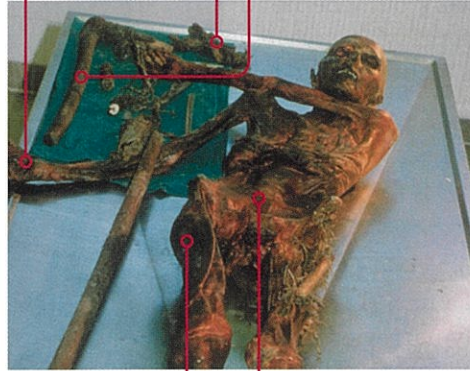
Radiocarbon dating experts found that Ötzi was preserved in ice for 5300 years.

Workers, not realising this was an ancient body, used a jackhammer to remove it.



The discovery turned out to be: a male, 165 cm tall, 38 kg in weight (55 kg at time of death), someone aged about 45 at time of death (based on analysis of his bone density).

Pathologist Dr Egarter Vigl found a 3.5 cm cut on Ötzi's right hand. This seemed to be a wound resulting from someone attacking him.



Damage to left hip and thigh caused by jackhammer

Molecular biologist Dr Tom Loy found four different blood types on Ötzi's arrows and flint knife.

Archaeologist Dr Konrad Spindler identified Ötzi's axe as one from the Neolithic Age.

Ötzi had 57 tattoos on his back, right knee and ankle. Scientists identified their locations as matching the acupuncture points that people use today to treat conditions such as osteoarthritis, which Ötzi suffered from.



Radiologist Dr Paul Gostner took X-rays and CT scans. These showed Ötzi had a 13 mm wound from an arrowhead embedded in an artery. This caused massive blood loss, shock and ultimately a cardiac arrest.

Italian Alps about 5300 years ago and was found by German climbers in 1991. His body had lain frozen in a glacier and was uncovered only because of another unusual storm.

RETROFILE

- In the 14 years between the discovery of Ötzi in 1991 and October 2005, seven people connected with Ötzi died. Some people now claim that Ötzi has placed a curse on those linked to the investigation of his remains. On the other hand, many more people have survived despite their involvement in this investigation.
- Shoe expert Petr Hlavacek has found Ötzi's shoes to be comfortable, providing good protection from heat and cold and good shock absorption — in other words, meeting the standard that people would expect today for shoes for Ötzi's environment.
- DNA experts have worked out that Ötzi is unlikely to have any genetic descendants.

radiocarbon dating: a method of estimating the age of an object by measuring the amount of carbon 14 left in remains such as wood, bone, charcoal or fossils

ACTIVITIES

CHECK YOUR UNDERSTANDING

- 1 Identify the kinds of events that may cause something of historical value to be buried.
- 2 List some of the different ways an archaeologist could learn whether an area is worth digging up and investigating.
- 3 List three famous archaeological finds of the twentieth century. In what ways are they different from one another?

USE THE SOURCES

- 4 Read the information in source 2 and answer the following questions.
 - a List the experts who were involved in the investigation.
 - b Use source 2 to write 8 to 10 lines summarising what we know about Ötzi. Include information about:
 - why his body survived so long
 - his physical characteristics
 - the types of investigation people have carried out on his remains
 - the likely reasons for his death.
- 5 List the questions you think must be answered in order to understand more about Ötzi the Iceman.