

3 Read the text about the interior of the Earth and answer the questions below.

Nobody has seen the interior of the Earth. So how do scientists know about the internal structure of the Earth?

In the 1970s, scientists from the USSR decided to drill a hole deeper than anyone had ever done before. For the next 24 years, they drilled 12 km into the Earth's crust in the Kola Peninsula in northern Russia. The temperature at the bottom of the hole reached 180°C. This was too hot to continue drilling.

The Russian scientists estimated that the distance to the centre of the Earth is nearly 6400 kilometres.

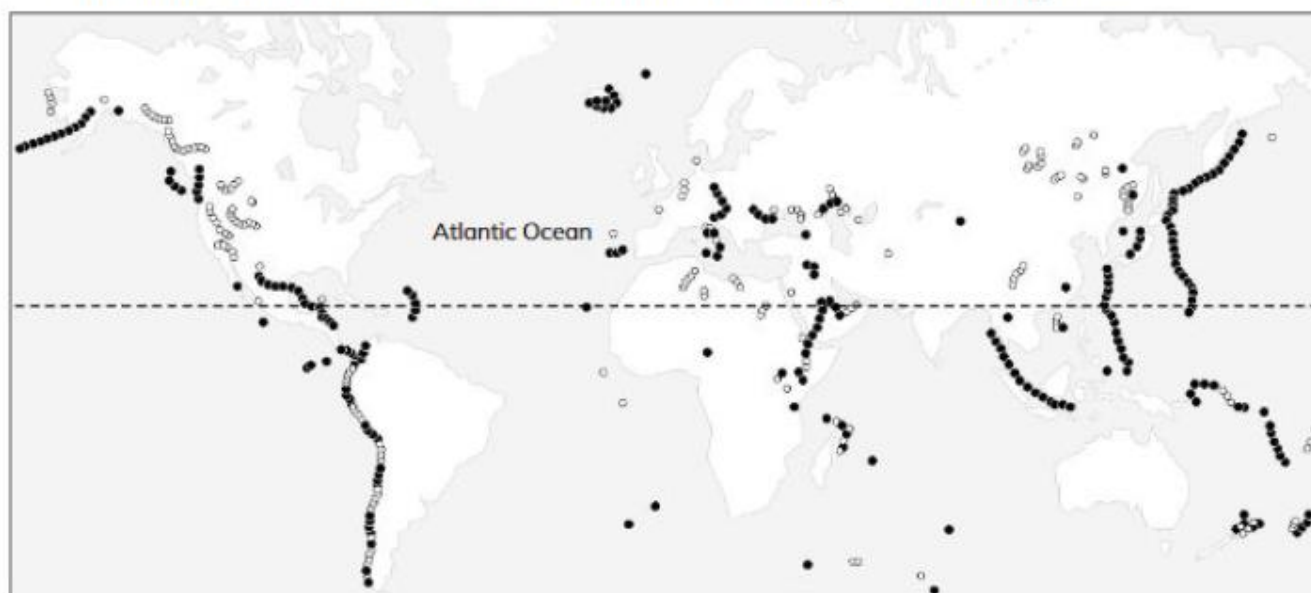
Because it is impossible to drill a hole to the centre of the Earth, scientists have to use other ways to find out about the structure of the interior of the Earth. They use earthquake waves to tell them what the materials in the interior of the Earth are like. The waves travel through the Earth during and after an earthquake. The speed of the waves is affected by the hardness of material they pass through. These studies show that the outer core is liquid and the inner core is solid.

a How deep is the deepest hole ever drilled through the Earth's crust?

b Why can people not make a deeper hole?

c How did scientists discover that the inner core is solid and the outer core is liquid?

- 2 This map shows where there are volcanoes in the world.
The black circles are volcanoes that erupt regularly.
The white circles are old volcanoes that have not erupted for a long time.



- a Find the Pacific Ocean on the map.
Use a coloured pen or pencil to draw in the Pacific Ring of Fire.
- b Why is this area called the Pacific Ring of Fire?

- c Why do some parts of the world have lots of volcanoes and other parts of the world have no volcanoes?

- b List **three** types of damage that result from earthquakes.

c Which part of the world has the most earthquakes?

2



a What is this huge sea wave called?

b What causes it to happen?

c Describe what will happen to this village.



A



B

1 Look at Picture A.

a Describe the habitat.

b Identify the animal.

c Describe **one** way that this animal is suited to its habitat.

2 Look at Picture B.

a Describe the habitat.

b Identify the animal.

c Describe **one** way that this animal is suited to its habitat.

3 Look at these pictures of the feet of different birds.



A



B



C



D

a Which bird do you think grips branches of trees?

b Which bird do you think walks?

c Which bird do you think swims?

d Give an example of a type of bird that swims.

e Which bird do you think eats smaller birds and small animals?

f Give an example of a type of bird that eats smaller birds and animals.
