

Where in the World?

Iceland

By Cally Harmer

Have you ever wondered how long the land you are standing on has been around? Did you know that the rocks in different parts of the world have been here different lengths of time? The oldest parts of Iceland were formed about 20,000,000 (20 million) years ago, which seems a long time, but the oldest rocks in the world are in northwestern Canada and are 4,000,000,000 (4 billion) years old. If the rocks in Canada were an 83 year old lady, Iceland would be 5 months old; it has some of the youngest rocks on Earth and is still, very slowly, growing.

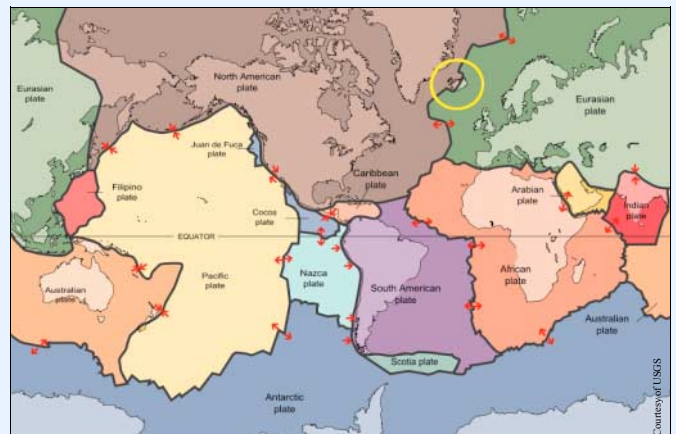


Courtesy of NASA

Iceland is situated on the northern edge of Europe, next to Greenland and near the Arctic Circle. Its total area is 103,000 km² and it has a population of just over 325,000, making it the most sparsely populated country in Europe. Its capital city is Reykjavík.

Tectonic plates

Since the 1960's an idea was formed about how new rocks are made and why some places have more earthquakes and volcanoes. The idea is tectonic plates. These are huge parts of the Earth's crust which are floating around on the liquid molten rock deeper in the Earth. Because they are floating around they move against each other. In some places, like Iceland, they are moving apart and creating new land. Iceland is growing very slowly - at the same speed as your fingernails!



Iceland (circled), lies on top of where two tectonic plates meet.

Geysers

Because the tectonic plates are moving apart, melted rock, or magma, is close to the surface in Iceland. It needs a high temperature, 700-1300 °C to get rocks to melt, so in places the land's surface is hot enough to boil water! Where there is underground water it can boil underground and gush out in an explosion at the surface called a geyser.



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Nature in Iceland

There are lots of mosses and lichens in Iceland. These cover the landscape in different colours. They have lots of birds which migrate, or travel, to avoid the long cold winters. One migrant bird which we get in Ireland is the redwing, they call it Skógarpröstur. Because Iceland is a young island, not many tree species have been able to get there yet. Also because it can get cold, the trees that grow there are usually quite small. There is a joke in Iceland about this..."What do you do if you get lost in an Icelandic forest?" "Stand up!"



A redwing, known as Skógarpröstur in Iceland.

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