

After your alarming space adventure, it's back down to Planet Earth with a bump. You might think the Earth is just a boring lump of solid rock, but scratch the surface and it's a whole different story. Underground, there are all sorts of warm and wobbly bits you can't normally see. Luckily, we've managed to get hold of an exciting X-ray to show you what the inside of the Earth really looks like. Here's Uncle Cliff with an in-depth look...

## Planet Earth: an X-ray view

**Crust:** This is the bit we live on. It's a hard layer of rock that covers the Earth like a shell. Actually, the crust's quite thin – about 40 km on land and 6–10 km under the sea. But you can jump up and down on it all you like. It's so strong you won't fall through.

**Mantle:** Below the crust, there's a thick, gooey layer called the mantle. It's about 3,000 km thick. Deep down, the mantle's so scorchingly hot (a sizzling 1,980°C) that some of the red-hot rocks have melted. (This melted rock is called magma.)

**Outer core:** The next layer is called the outer core. It's like a boiling-hot sea of liquid metal – mostly iron and nickel. Core blimey!

**Inner core:** The inner core's the centre of the Earth, a bit like the core of an apple. But this core's a solid ball of iron and nickel about 2,500 km wide! The metal's a mind-boggling 4,500°C hot but it doesn't melt because of the weight of all the other layers pressing down on it.

THIS IS INSIDE THE EARTH.

CORE!

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## Crazy crust jigsaw

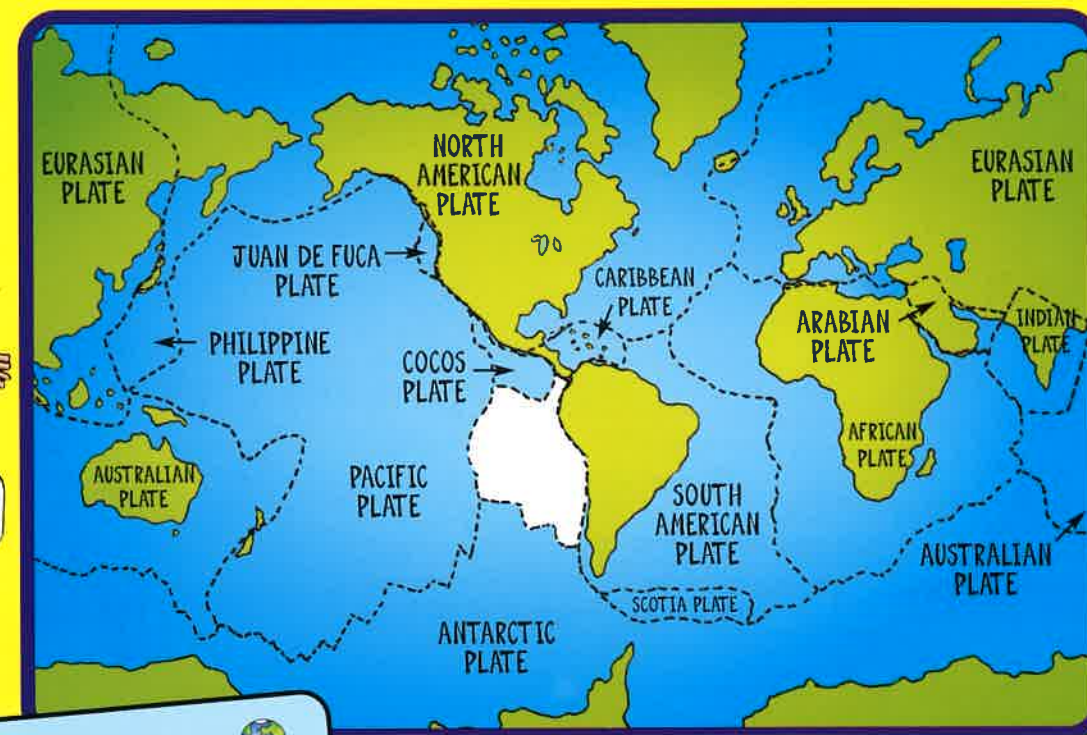
Picture the Earth as a gigantic boiled egg you've just bashed with a spoon. (OK, so you'll need to use your imagination for this bit.) The Earth's crust (the eggshell) is cracked into seven massive (and lots of smaller) pieces called plates. But forget the sort of plate you pile with

yummy pizza. These plates are slabs of solid rock that float on top of the mantle. Is all this talk of food making you peckish? Or have you got enough on your plate? Here's Wanda and Parky with a handy map of the plates for you to feast your eyes on:

ONE MORE  
PLATE TO GO.



TWO!



## TEACHER TEASER

Which of these isn't a kind of rock?  
a) Sedimentary. b) Igneous. c) Gormless.

**Answer:** Gormless is a word you might use to describe your geography teacher, while the other two are types of rock. Sedimentary rocks are made from squashed sand and sea creatures. Igneous rocks are chucked out of volcanoes. (A third type of rock is called metamorphic and it forms from cooked or crushed sedimentary and igneous rocks.)

## WICKED WORLD FACTS

The Earth isn't perfectly round. It's flat at the top and bottom and it bulges a bit in the middle, like a great big squashed tomato.

You'd need super-sized scales to weigh the enormous Earth. Scientists reckon our planet weighs a whopping 6,000 MILLION MILLION MILLION tonnes.

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