

# THE CONTINENTS



A continent is one of Earth's seven main divisions of land. The continents are, from largest to smallest: Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

## Building the Continents

The Earth formed 4.6 billion years ago from a great, swirling cloud of dust and gas. The continuous smashing of space debris and the pull of gravity made the inside of Earth heat up. As the heat increased, some of Earth's rocky materials melted and rose to the surface, where they cooled and formed a crust. Heavier material sank toward Earth's centre. Eventually, the earth came to have three main layers: the core, the mantle, and the crust.

The crust and the top portion of the mantle form a rigid shell around the earth that is broken up into huge sections called tectonic plates. The heat from inside the earth causes the plates to slide around on the molten mantle. Today, tectonic plates continue to slowly slide around the surface, just as they have been doing for hundreds of millions of years. Geologists believe the interaction of the plates, a process called plate tectonics, contributed to the creation of continents.

If you could visit Earth as it was millions of years ago, it would look very different. The continents have not always been where they are today. About 480 million years ago, most continents were scattered chunks of land lying along or south of the Equator. Millions of years of continuous tectonic activity changed their positions, and by 240 million years ago, almost all of the world's land was joined in a single, huge continent. Geologists call this supercontinent Pangaea, which means "all lands" in Greek.

By about 200 million years ago, the forces that helped form Pangaea caused the supercontinent to begin to break apart. The pieces of Pangaea that began to move apart were the beginnings of the continents that we know today.

## Identifying the Continents

When geographers identify a continent, they usually include all the islands associated with it. Japan, for instance, is part of the continent of Asia. Greenland and all the islands in the Caribbean Sea are usually considered part of North America.

Together, the continents add up to about 148 million square kilometres of land. Continents make up most—but not all—of Earth's land surface. A very small portion of the total land area is made up of islands that are not considered physical parts of continents. The ocean covers almost three-quarters of Earth - more than double the area of all the continents combined.

*(This is an edited version of a text from National Geographic.)*