



# All about Volcanoes

# What Are the Different Parts of a Volcano?

A cloud of ash. It is formed by volcanic explosions

The mouth of a volcano. It surrounds the vent.

vent

ash cloud

crater

An opening in the surface of the Earth through which volcanic materials, such as magma, can escape.

throat

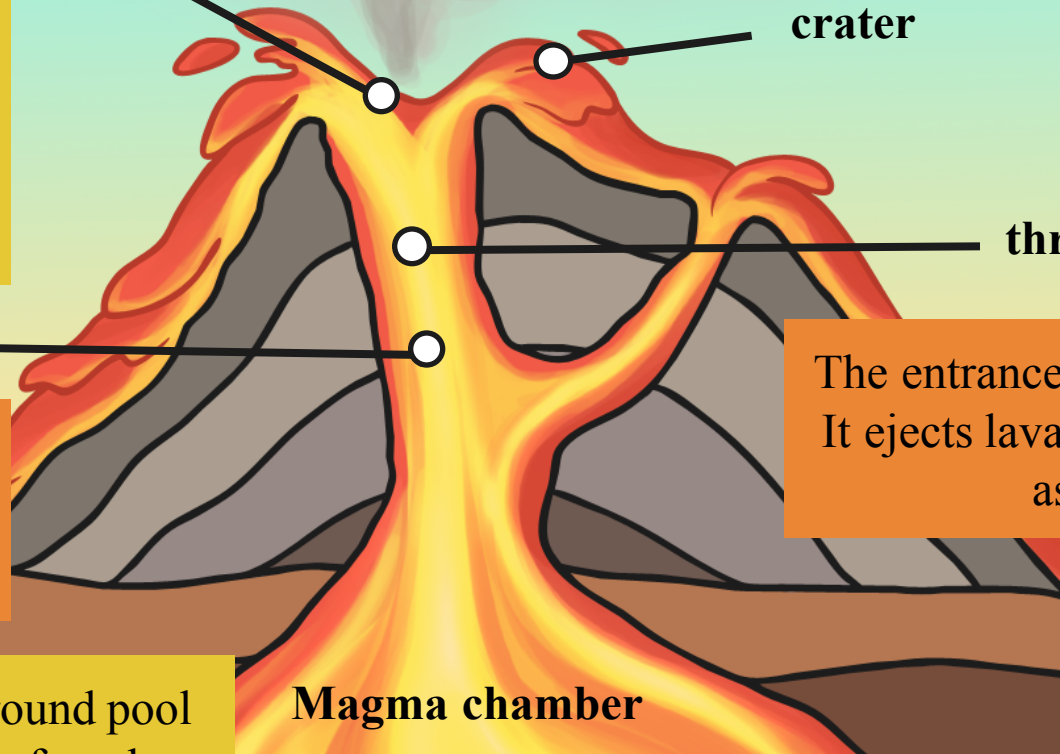
conduit

The entrance of a volcano. It ejects lava and volcanic ash.

An underground passage which magma travels through.

A large underground pool of liquid rock found beneath the surface of the Earth.

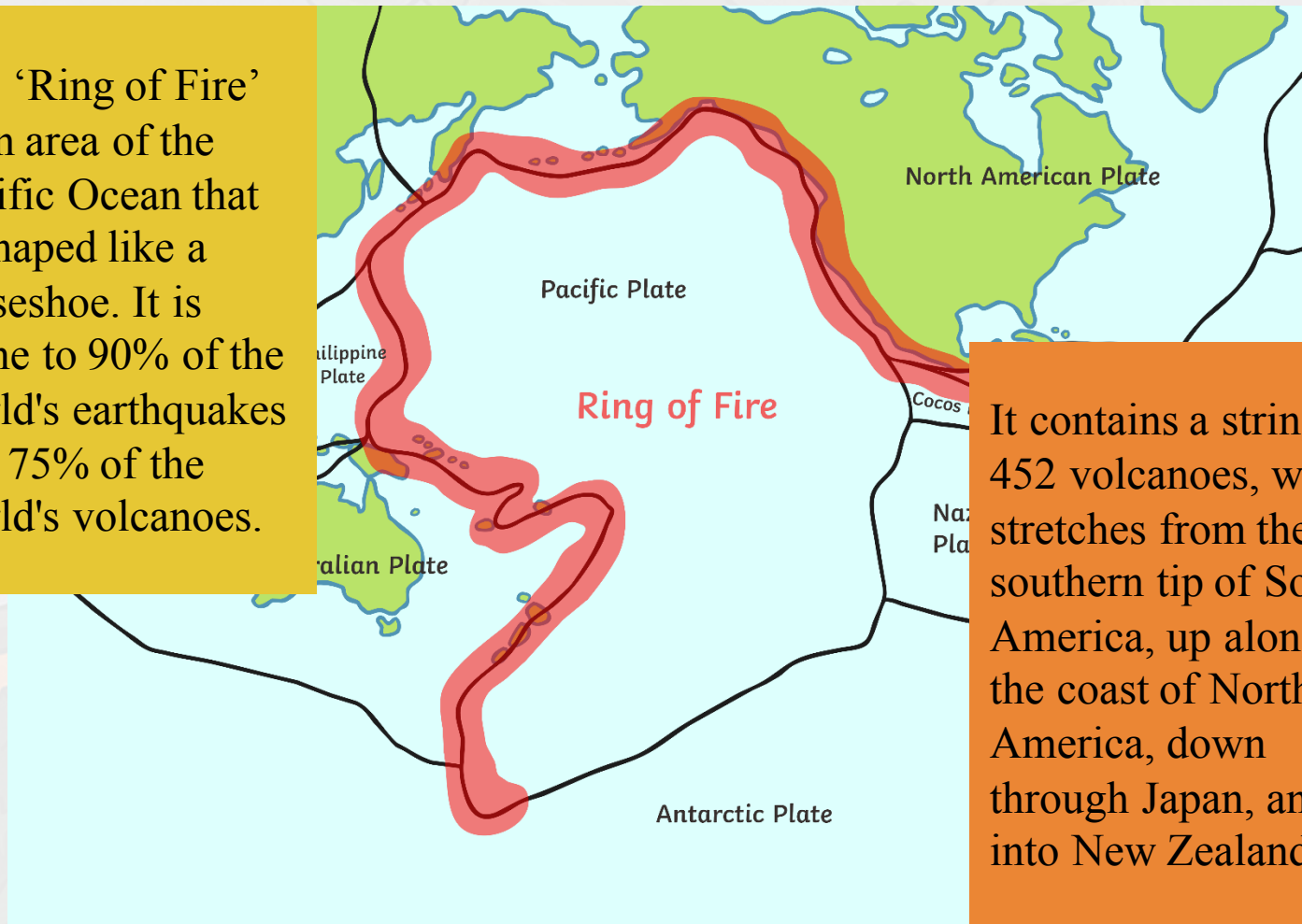
Magma chamber





# Where Are Most Volcanoes Located?

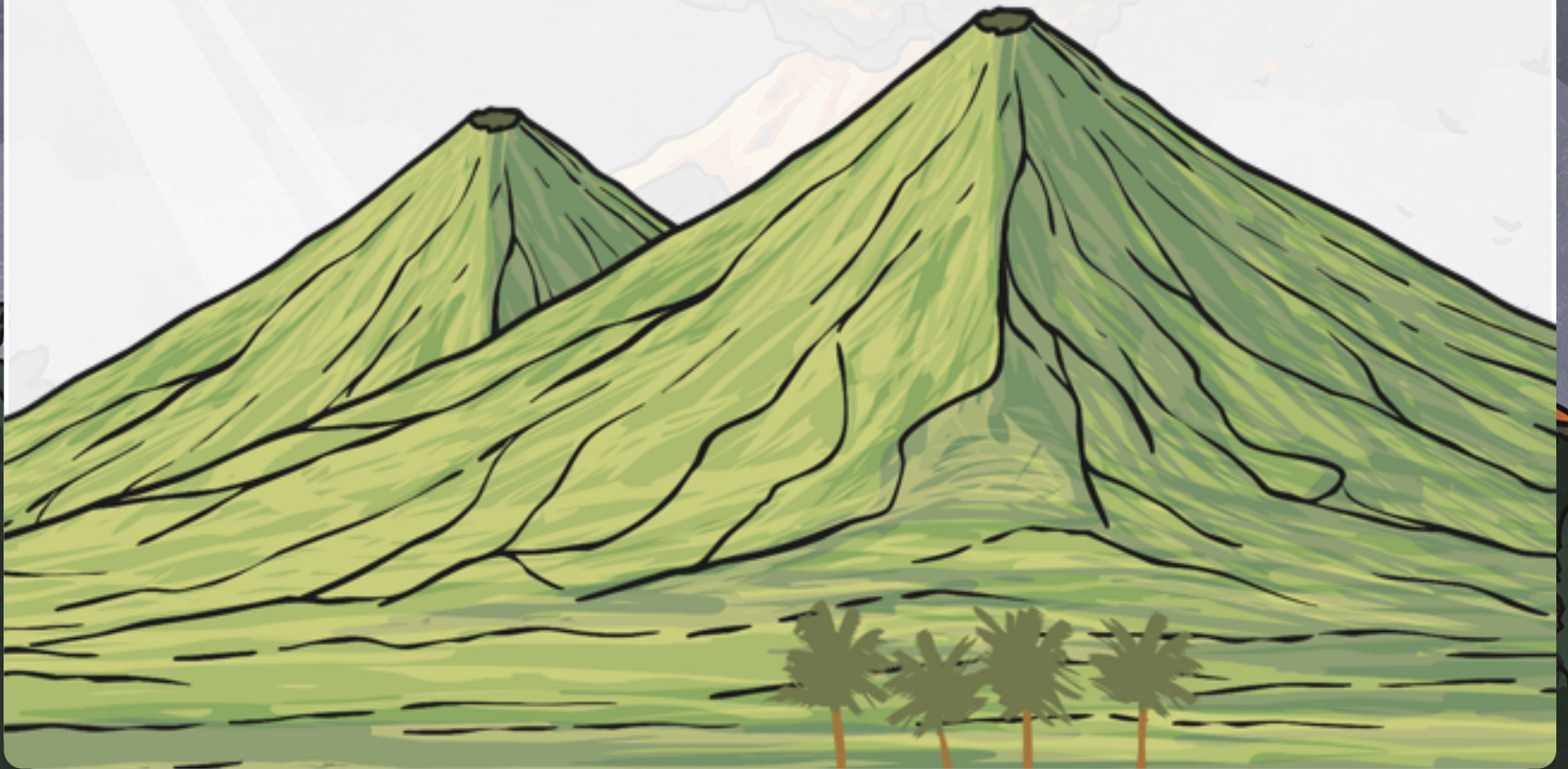
The 'Ring of Fire' is an area of the Pacific Ocean that is shaped like a horseshoe. It is home to 90% of the world's earthquakes and 75% of the world's volcanoes.



It contains a string of 452 volcanoes, which stretches from the southern tip of South America, up along the coast of North America, down through Japan, and into New Zealand.

# How Many Volcanoes Are There?

There are more than 1500 active volcanoes on Earth. There are also more than 80 volcanoes under the ocean, although these are just the ones that have been discovered.





## More Volcano Facts

### What is the difference between magma and lava?

Magma is liquid rock inside a volcano. Lava is the name for liquid rock that has flowed out of a volcano. Lava takes a long time to cool down as it is not a good **heat conductor**. As a lava flow cools down, it gets slower and thicker.

### What is a 'pyroclastic flow'?

This is the most deadly of all volcano activities.

It is a liquidised mixture of solid and part-solid fragments and hot, expanding gases.

They look like a snow avalanche but are extremely hot and contain poisonous gases. They move at the speed of a hurricane.

**Heat Conductor:** something which can transfer heat from one object to another.



# What Is the Largest Active Volcano?

## Mauna Loa



The largest, active volcano in the world is Mauna Loa in Hawaii. It is 13,677 feet above sea level. From its base below sea level to its summit, Mauna Loa is taller than Mount Everest.



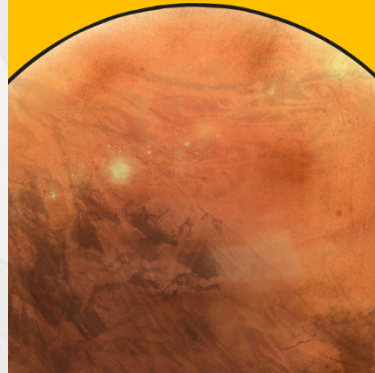
# Are There Volcanoes on Other Planets?

Earth is not the only planet to have volcanoes, although most of the volcanoes on other planets are now extinct.

**Mercury** used to have volcanoes but when the planet's interior cooled down, the volcanoes died.



**Mars** has the largest known volcano called Olympus Mons. It is no longer active and will probably never erupt again.



**Io** is one of Jupiter's moons and has several active volcanoes.



**Triton** is Neptune's largest moon. Instead of lava, the volcanoes on Triton actually release ice.

