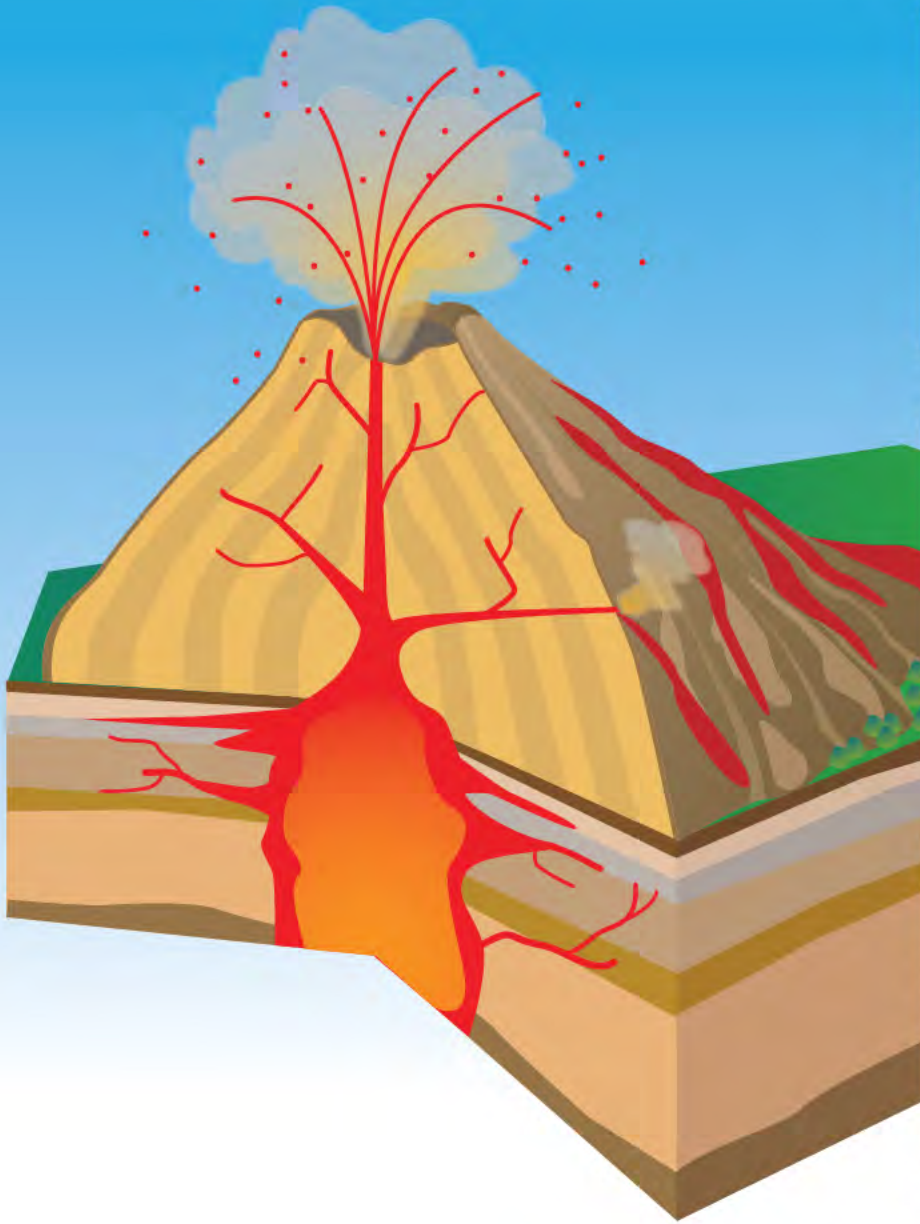


# Volcanoes

## *Learning Guide*



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ISBN 978-1-63212-054-0

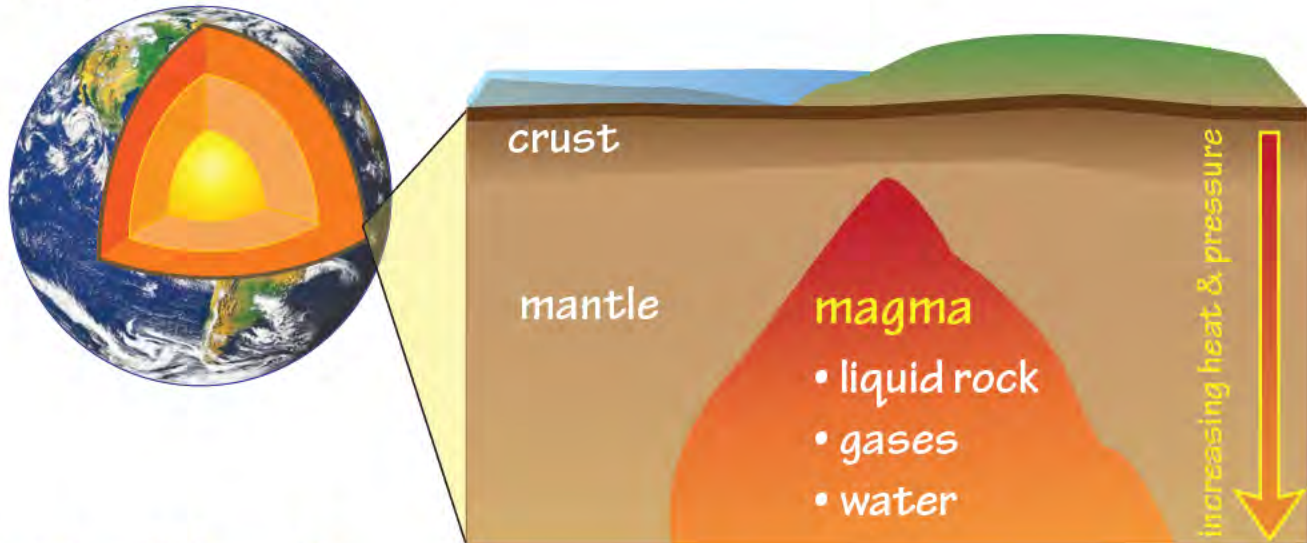
Printed in the United States of America.



# INTRODUCTION TO VOLCANOES

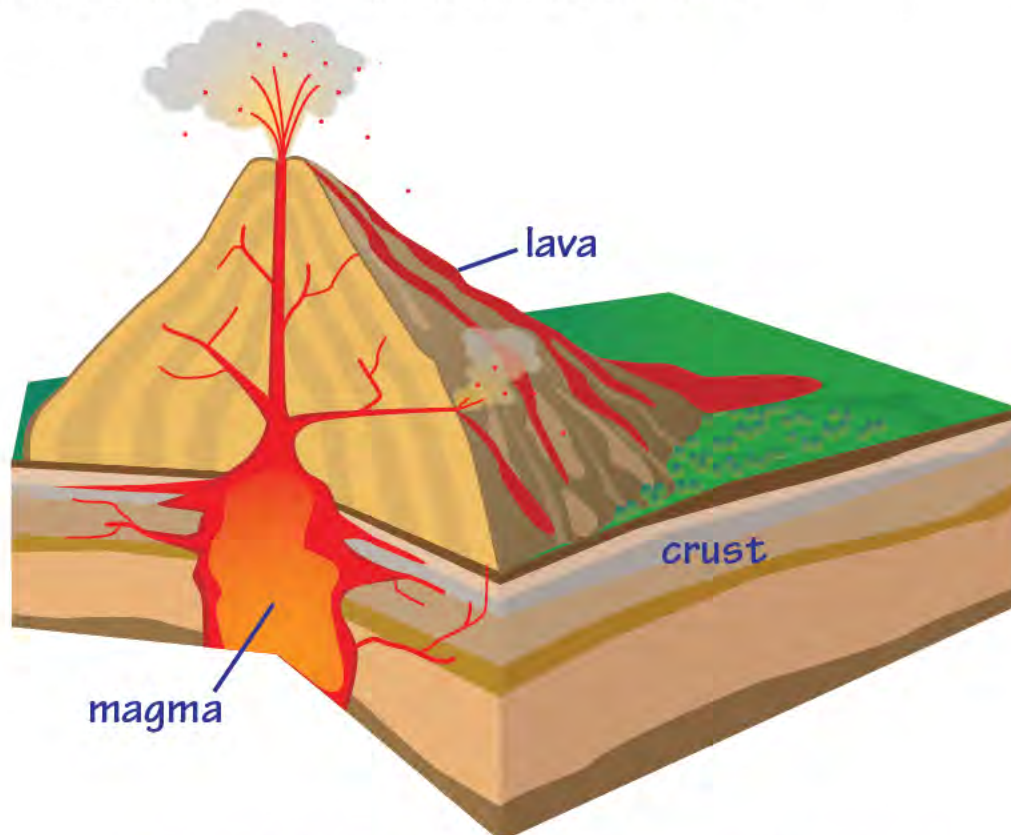
## Magma Formation

**Magma** is a mixture of **liquid rock**, **gases** and **water** formed from intense heat and pressure in the Earth's **mantle**.



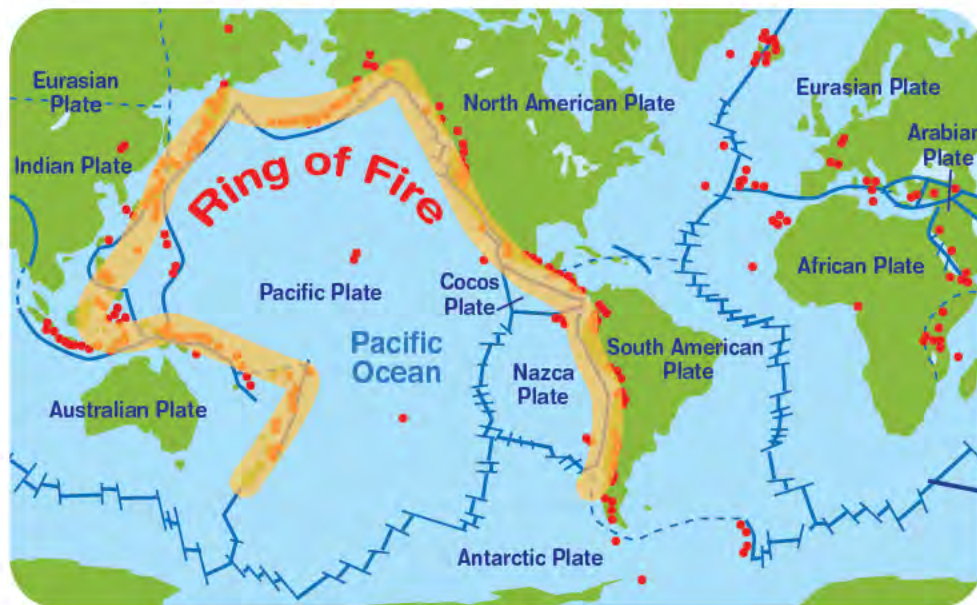
## What Is a Volcano?

A **volcano** forms when **magma** moves through the crust and erupts onto the surface of the Earth. **Magma** that flows onto the Earth's surface is called **lava**. Layers of cooled lava harden into rock and build up on the Earth's surface around a **volcano**.



# VOLCANOES AND PLATE BOUNDARIES

Most of the Earth's volcanoes are located at **tectonic plate boundaries**. These volcanoes are found on both continental and oceanic crust.

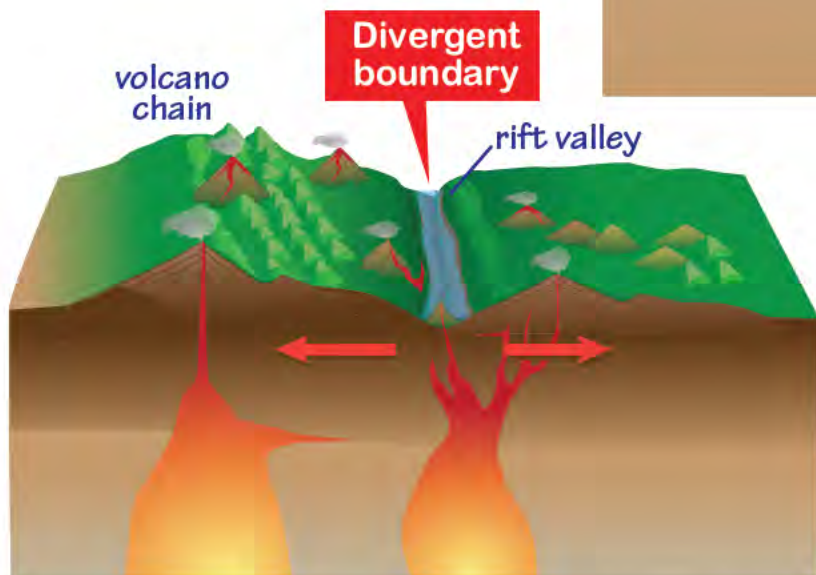
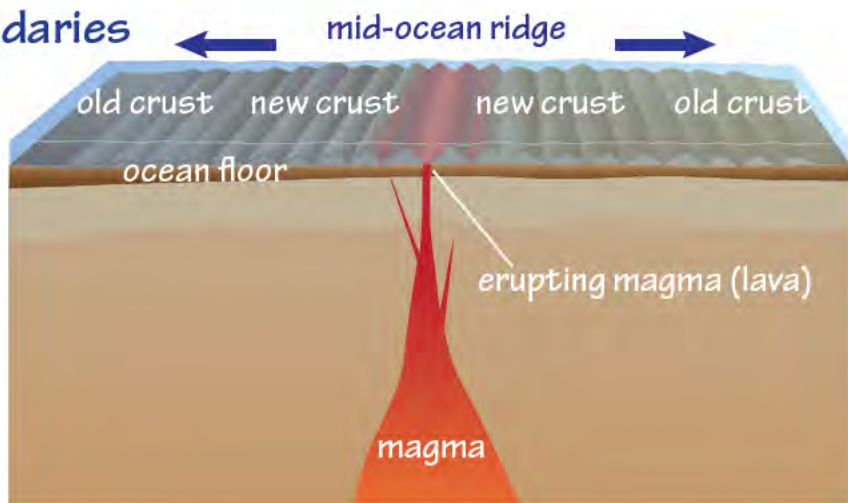


## Ring of Fire

The belt of volcanoes along the boundary of the Pacific Ocean is called the **Ring of Fire** because it contains about 75% of the world's active volcanoes.

## Volcanoes at Divergent Boundaries

Mid-ocean ridges form from lava pouring onto the ocean floor at **divergent plate boundaries**.



On land, divergent boundaries produce **chains of active volcanoes**.