A volcano is an opening on the top of a planet. It lets burning hot rock and gas escape. This material is deep in the earth. When it shoots to the surface — boom! The volcano erupts. It releases the material.

Some volcanoes shoot this material sky-high. Others let it slowly ooze.

**Active, Dormant And Extinct Volcanoes**

There are three kinds of volcanoes.

Some volcanoes are active. This means they erupted not long ago. They may erupt again soon.

Some volcanoes are dormant. They have not erupted in a long time. However, they may still erupt someday.

Other volcanoes are extinct. They have not erupted in a long time. They will probably not erupt again.
Magma Rises And Lava Flows

Earth is a rocky planet. Like other rocky planets, it has an outer shell. The shell is not one piece. It is made up of many pieces. These are called plates.

The plates float on a layer of magma. Magma is a hot mix of rock and gas. It is like a thick soup with chunks of rock in it.

Volcanoes happen when magma rises up. Magma wants to burst out of the surface. When it does, it is called lava.

Magma's Different Movements

Magma can rise in three ways.

Earth's plates shift. Sometimes they move away from each other. Then magma rises up. It fills the open spaces. It pushes to the surface.

Other times, the plates crash. One piece curls under the other. The piece that goes down gets very hot. It melts, becoming magma. The magma then rises. It pushes up to the outside.
Magma also rises over hot spots. Hot spots are hot places inside of Earth. They heat up the magma. This makes it rise.

The reasons why magma rises are different. The result is the same, though: a volcano!

Volcanoes On Other Planets And Moons

Do other planets have volcanoes? Yes, they do! Venus once had them. So did Mars. Those volcanoes stopped erupting long ago. They are extinct.

Jupiter, Saturn and Neptune’s moons have volcanoes. Their volcanoes are active. Some are erupting right now.

NASA is the U.S. space group. This group has sent spacecraft to other planets. The spacecraft take pictures of the planets’ surfaces. That is how we know there are volcanoes in space.