

# [Causes and effect of volcano eruption essay sample](https://assignbuster.com/causes-and-effect-of-volcano-eruption-essay-sample/)

A volcano can be described as a hole in the earth’s crust that opens to the surface.   During a volcanic eruption, molten rock, ash, cinders, gas, steam, and other lumps of rock hurls into the air through that opening.  During the recent Iceland volcanic activity, an opening through the earth crust led hurled rocks, ash, cinders, gas, and lumps of rocks, lava, and others into the atmosphere which came with devastating effects (Fema). Volcanoes mainly occur at the weak points in the earth’s crust. There are weak points at the boundaries of the plates and beneath the sea bed referred to as hot spots at which volcanic eruption are likely to occur. Deep within the earth crust, there is build up of energy due to plate formation activities and when there is an opening on the earth surface, this energy pushes volcanic materials above the ground. Volcanic activities result from powerful forces of nature and they have many beneficial and destructive effects on earth, as was learned from the recent Iceland volcanic activities.

Volcanic activities are caused by different factors. They are formed when a vein of magma build up enough energy that pushes its way upwards through the volcanic openings into the earth surface. Deep within the crust, there is build up of energy that is used in formation of the oceanic crust. Oceanic crust is formed from the hot molten rock which slowly cool and solidify (Fema). The hot molten rock is referred to as the magma but when it reaches the earth surface through an eruption, it is referred to as lava. Earth is made up of different plates like an onion. Although it appears rigid, the plates are in constant movement and at times, one plate goes under the other and it becomes hot turning into liquid magma. Therefore a volcano can be described as a mountain opening downward to a pool of molten rocks in the deep crust. Due to plate tectonic movements and other plate formation activities, there is a build up of pressure which causes a volcanic eruption. The main reason why volcano erupts is due to build up of gases.

When enough gas builds up, it blows up the magma through the vent into the earth’s surface. Due to high pressure from build up of the gases, volcanic activities push volcano materials kilometers above the earth surface.  During a volcanic eruption, there is release of magma which comes out as lava, ash which is finely powdered rock looking like dark smoke,  cinder which include fragmented lava, and pumice  which include  light weight  rocks with air bubbles  which are mainly formed during an explosive eruption and can float on water.  There are many effects of volcanic eruption. The hot lava, which spreads over a large area can kill people and destroy properties (BBC).  When volcanic activities are detected authorities warn people in the affected area to free for safety as volcanic materials can kill. Destruction of the crops means that lava can lead to famines. They can also cause bush fire. Although there were no incidences of death in the recent Iceland volcanoes, past volcanic activities have recorded deaths. Volcanoes also change weather (BBC). They can cause acid rain, thunder and lightening, clouded atmosphere, and others. The recent Iceland volcanic eruption disrupted air transport due to clouding of volcanic ash (Weise, Vergano and Rice).  People spend days in airports waiting for their flights to be approved. This was a devastating effect on the world economy which was caused by volcanic eruption.

Volcanic activities are natural occurrences that are controlled by forces of nature. They are caused by changes in the earth crust, which leads to eruption of magma and other volcanic materials into the earth surface owing to build up of gases deep within the crust. As was evidenced in the recent Iceland eruption, volcanic eruptions have various effects including destruction of plants and clouding of the atmosphere which disruption air transport.

References

Weise Elizabeth, Vergano Dan, and Rice, Doyle. Icelandic volcano: The impact is broad, but could be worse. April 20, 2010. May 1, 2010.

BBC. Volcanoes. May 1, 2010.

Fema. Volcanoes. May 1, 2010.