

## JAG01 Unit 6 Volcanoes

### Task 1 Speaking

**What does it mean when you describe someone as a “dormant volcano”? What other types are there?**

### Task 2 Vocabulary

**Can you guess the words which are described below?**

- *a hill formed by (solidified) lava and pyroclastics that are built up around a volcanic vent*
- *an opening at the Earth's surface or the passage through which volcanic materials are extruded during an eruption*
- *an almost circular depression at the summit of a volcano where volcanic materials are released*

### Task 3 Reading

**A) Scan the text below. What are the main effects of volcano hazards? What do they depend on?**

#### Effects of Volcano Hazards

Many kinds of volcanic activity can endanger the lives of people and property both close to and far away from a volcano. Most of the activity involves the explosive ejection or flowage of rock fragments and molten rock in various combinations of hot or cold, wet or dry and fast and slow. Some hazards are more severe than others depending on the size and extent of the event taking place and whether people or property are in the way. And although most volcano hazards are triggered directly by an eruption, some occur when a volcano is quiet.

Volcanic eruptions are one of Earth's most dramatic and violent agents of change. Not only can powerful explosive eruptions drastically alter land and water for tens of kilometres around a volcano, but tiny liquid droplets of sulphuric acid erupted into the stratosphere can temporarily change the planet's climate. Eruptions often force people living near volcanoes to abandon their land and homes, sometimes forever. Those living farther away are likely to avoid complete destruction but their cities and towns, crops, industrial plants, transportation systems, and electrical grids can still be affected.

**B) In the text above find one word for each definition:**

Small pieces or parts, especially when broken from something whole: .....

Causing great pain, damage, worry, etc., very serious: .....

In a way that does not last for long or for ever: .....

To leave a place, thing or a person, usually for ever: .....

Systems of wires through which electricity is connected: .....

**C) List all the possible effects volcanoes can have on the environment and people living in their proximity.**

**D) Study the cause and effect relationship in the sentences below. Identify the words that are used to express it.**

1. Most volcano hazards are triggered directly by an eruption.
2. Electrical grids can be affected.
3. The ash spewed by a volcano can negatively affect the engines in an aircraft.
4. The explosiveness of the eruption could cause pyroclastic flows which would destroy anything within their path.
5. Volcanoes can be destructive but volcanic action can lead to the formation of fertile soils.
6. Ash and lava could have a negative impact on the soil, primarily through making the soil more acidic.

**Describe the cause and effect relationship between other phenomena, e.g. earthquakes and tsunamis, earthquakes and volcanoes, human activity and global climate change, etc.**

**E) Word formation: Prefixes hyper-, hypo-, post-, sub-  
Guess the meaning of the following words:**

*hypersonic*

*postglacial*

*hypertext*

*postmortem*

*hypothermia*

*submerge*

*hypocacidic*

*suboceanic*

#### **Task 4 Video – The Colossal Consequences of Supervolcanoes**

**Watch and answer the questions below.**

(<https://ed.ted.com/lessons/the-colossal-consequences-of-supervolcanoes-alex-gendler/>)

1. What do you think were the main aspects of the events of 1816 that made people suspect a supernatural apocalypse?
2. Which aspect of a supervolcanic eruption makes it deadly?
3. What caused the genetic human evolution bottleneck 70,000 years ago?
4. Describe the steps of how a caldera is formed and how it leads to a supervolcanic eruption.
5. Which famous USA landmark sits atop a supervolcano?
6. How can the devastating effects of a supervolcano be avoided?