

**Differentiate between the following.**

1. When pressure inside the Earth builds up, volcanic eruptions occur.

An 'earthquake' is the shaking and vibration on the surface of the Earth caused by underground movement.

2. The rocks inside the Earth are present in liquid form due to very high temperature. These liquid rocks are known as magma.

When the magma flows out of a volcano, it is known as Lava. Lava can be thick and slow-moving or thin and fast-moving.

3. An avalanche is a movement of snow, ice and rock down a mountainside. It is also commonly known as 'snowslide'.

A tornado is a violent rotating column of air. They are often referred to as a twister.

**Short answer questions**

1. A natural disaster is an event caused by natural forces. It often has a significant effect on the shape of the Earth or on the lives of people and other living things. Natural disasters have been taking place for as long as the Earth has existed.
2. Land disasters occur due to changes inside the Earth's surface. For example, volcanoes, landslides and earthquakes.

- a. Tsunami is a Japanese word with the English translation, "harbour wave." Represented by two characters, the top character, "tsu," means harbour, while the bottom character, "nami," means "wave."
- b. Tsunamis are large powerful ocean waves which are caused by certain disturbances inside the sea or ocean. These giant waves can travel for thousands of miles across the sea. They have enough energy and force to destroy buildings, trees, wildlife and people.
- c. The intensity of tornado is measured with a Fujita Scale or F scale. It ranges from F0 to F6.
- d. An 'earthquake' is the shaking and vibration on the surface of the Earth caused by underground movement. The magnitude of earthquakes is measured on a scale known as 'Richter scale'. The scale ranges from 0 to 8.0.
- e. The place in the Earth from where an earthquake originates is known as the 'Focus'. The point on the Earth's surface directly above the focus is known as the 'Epicentre'. Maximum destruction takes place at the epicentre. When there is disturbance at the focus, pressure is released in the form of waves. These waves are known as 'seismic waves'. These waves travel through the Earth and reach the surface.

#### ng answer questions

- a. Forest fire or bushfire is the uncontrolled fire that breaks out in the wooded areas. Such fire is caused naturally by lightning during thunderstorms. The fire in forest areas goes out of control as it spreads very fast. Wind is the major factor responsible for spreading the fire. Wind may even blow a bushfire to areas where people live, causing damage to life and property. Besides the natural factors, it has been found that human activities are also responsible for causing forest fires.
- b. An 'earthquake' is the shaking and vibration on the surface of the Earth caused by underground movement. Some earthquakes are so slight that they are barely felt whereas some of them are so violent that they cause extensive damage. A strong earthquake can even cause splitting of the ground. The place in the Earth from where an earthquake originates is known as the 'Focus'. The point on the Earth's surface directly above the focus is known as the 'Epicentre'. Maximum destruction takes place at the epicentre.
- c. When there is disturbance at the focus, pressure is released in the form of waves. These waves are known as 'seismic waves'. These waves travel through the Earth and reach the surface. The seismic waves shake the Earth as they move through it. When the waves reach the surface, they shake the ground and everything on it. The magnitude of earthquakes is measured on a scale known as 'Richter scale'. The scale ranges from 0 to 8.0. An earthquake is usually considered much more serious once it hits above 5. At magnitudes of 7.0 or 8.0, the damage can be catastrophic.