

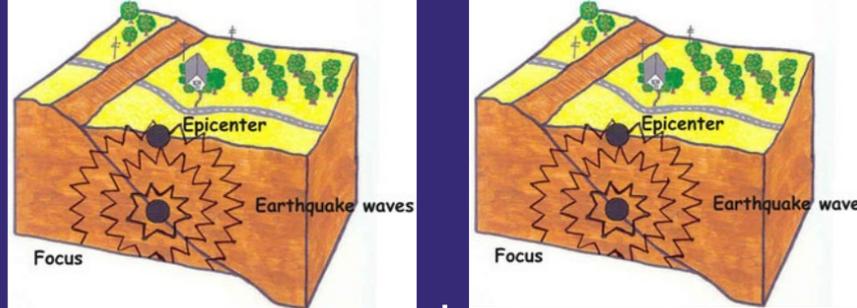


Marissa's &  
Daniela's  
Natural Disaster  
Fact-file



## EARTHQUAKES

### What are Earthquakes?



- 1) Earthquakes happen because of movement with the tectonic plates (the Earth's outer shell) moving around in the Earth's crust.
- 2) There are such things as shock waves that travel through the Earth's interior at different speeds
- 3) Earthquakes are natural disasters in the ground, the common effect of earthquakes are minor but sometimes they can be catastrophic.
- 4) The different stages of the Mercalli scale: 1-instrumental, 2-weak, 3-slight, 4-moderate, 5-Rather strong, 6-strong, 7-very strong, 8-destructive, 9-violent, 10-intense, 11-extreme, 12-catastrophic.
- 5) Earthquakes can cause shifting in land, buildings to collapse and huge life loss.

### What causes an Earthquake?

- 1) The Earth's crust is made out of tectonic plates, (something like an Earth's jigsaw puzzle) these plates are currently moving past each other which creates the earthquakes.
- 2) Sometimes the plates push together, which causes a build up of tension, which causes the rocks to destroy.
- 3) Eventually the pressure becomes so big and a sudden shift on

## VOLCANOES

### What is a volcano?



- 1) Volcanoes are caused by molten (liquid) rock called magma pushing up from the center of the Earth.
- 2) The magma works its way up through the volcano and exits through the Earth's surface on the top called a vent.
- 3) Volcanoes can be active (it can erupt anytime), dormant (the volcano can erupt but it is unlikely to do so) and extinct (it has not erupted in recent historic history).

### How a Volcano erupts?

- 1) Volcanoes can erupt with massive forces, as a small eruption or just a tiny dribble.
- 2) Deep underneath the Earth's core, the crust, not all of the rock is solid and in some places the stone has turned into magma.
- 3) The magma rises through a gap in the crust and is trapped in an area called a magma chamber.
- 4) As more magma enters the chamber, pressure builds, until the magma is pushed up through a pipe-like vent and erupts onto the Earth's surface.
- 5) The eruption can be so forcefully that the magma is blasted into the air, breaking into billions of pieces.



## TSUNAMIS

### Whatisatsunami ?

- 1) A tsunami is a powerful ocean wave, it is usually caused by an earthquake or a tectonic plate moving underwater.
- 2) Tsunamis can also be caused by volcano eruptions underwater and mountains being caused.
- 3) If the earthquake is powerful enough, the movement of the ocean floor causes the water to go above sea level.
- 4) Tsunamis start as a fast moving wave at this stage they are so small that they can let ships pass.
- 5) Then, when they reach shallow water, the tsunami starts to slow down and begin to rise at waves up to about 60m.

What happens when a tsunami hits?

- 1) As soon as a tsunami approaches land, water bounces from the coast, if it is shallow enough the water may be pulled back.