# Natural Disasters! by Emil



# **Earthquakes**

what are earthquakes?

Earthquakes are when a place on the earth starts to shake caused be tectonic plates bumping, sliding into each. Tectonic plates are like puzzle pieces, there are up to 20 of them on the earth.

how do you measure an earthquake?

Seismometer is a machine that detects an earthquake by feeling its vibrations. A needle goes across it and goes up and down if there is a bump and everything starts shaking violently. Another way is a human one that detects your feelings that have 12 stages: 1 instrumental 2 weak 3 slight 4 moderate 5 rather strong 6 strong 7 very strong 8 disruptive 9 violent 10 intense 11 extreme 12 catastrophic.

epic earthquake facts:

- 1. The earths crust is 70km thick which is made up of roughly 20 pieces.
- Around 2 million earthquakes happen in a year!
- Most of all earthquakes occur in Japan.
- 4. 7000 people get killed by an earthquake every year and 30000 get homeless.
- After an earthquake there is a 75% chance that a tsunami will come (depending on if the country is near the sea.)
- 6. Roughly 8 earthquakes happen every day.
- 7. When an earthquake happens an earth day is longer by a miller second.

## Volcanoes

#### What are volcanoes?

Volcanoes are mountains made up off thick layers of ash and rock with a hole in the middle. Lava can pour out of the opening. There are different types of volcanoes depending on how sticky the lava is, there are also active volcanoes, which are volcanoes that most likely to erupt. Dormant volcanoes are ones that only erupt in about 2 years, extinct volcanoes are ones that never erupt.

#### Violent volcano facts:

- 1. There are around about 15000 volcanoes on earth!
- 2. The biggest volcano in the solar system is on mars called Olympus mons 600km wide and 21km tall!
- 3. Lava is extremely slow, it goes 5 miles per hour.
- 4. You cannot outrun an ash cloud, it goes 200 miles per hour!
- 5. 8000 of earths volcanoes are under water.
- 6. 80% of all the land on earth (including under the sea) are shaped as volcanoes!
- 7. When lava cools down it turns into a rock called obsidian.
- 8. Lava is so hot, even rain can't put it out!

Picture of a erupting volcano:

http://indianapublicmedia.org/amomentofscience/files/2012/09/181\_volcano.jpg

### **Tsumanis**

#### What are tsunamis?

Tsunamis are huge tidal waves, they can rise up to 60m! (200 feet) that can sweep in, destroying loads of houses. They are caused by an under water earthquake ore when a under water volcano erupts. Scientists are doing lots of experiments on what material is strongest and can survive a tsunami as well as making strong, tall walls to stop the tsunami sweeping in and killing loads of people and destroying a lot of land.

#### Salty tsunami facts:

- 1. When a tsunami is going to happen, the sea all goes away on the coast line, 20 minutes later it will sweep in.
- Tsunamis normally happen after an earthquake, depending on if the country is near the sea.
- 3. If a tsunami is going to happen, the best place to go is high ground.
- The Japanese word for tsunami litterily means 'harbour wave.'
- 5. Tsunamis can go up to 700 km per hour!
- 6. When tsunamis occur, they go in all directions, so they destroy loads of country's.
- 7. A tsunami is a small wave at first, but then it gets bigger and bigger as it approaches land.

## **Tornados**

#### What are tornados?

Tornados are twisters that can suck stuff from the ground up to 80 meters in sky. They look like funnels of wind that form when hot air mixes with cold, they can also be known as cyclones, twisters and of course, tornadoes.

#### Terrifying tornado facts:

- 1. A tornado can reach up to 300 miles per hour!
- 2. Over 1000 tornadoes happen in year all over America.
- 3. The tri- state tornado was the deadliest tornado in America, killing 695 people.
- 4. A tornado that occurs over water is called a 'waterspout.'
- 5. In 1989 the deadliest tornado in history killed 1300 people in Bangladesh
- 6. Weather radios can detect when and were are tornado will happen.
- 7. Only 30 tornados occur every year in England.

# Glossary