



Knowledge Organiser - Year 3

Natural Disasters



Vital Vocabulary	Definition
Volcano	A volcano is a mountain from which hot melted rock, gas, steam, and ash from inside the Earth, sometimes burst.
Active	An active volcano has erupted recently or is expected to erupt quite soon.
Dormant	Something that is dormant is not active, growing, or being used at the present time but is able to become active later on.
Extinct	An extinct volcano is one that does not erupt or is not expected to erupt any more.
Magma	Magma is molten rock that is formed in very hot conditions inside the earth.
Lava	Lava is the very hot liquid rock that comes out of a volcano.
Molten	Molten rock, metal, or glass has been heated to a very high temperature and has become a hot, thick liquid.
Crater	A crater is a very large hole in the ground, which has been caused by something hitting it or by an explosion.
Erupt	When a volcano erupts, it throws out a lot of hot, melted rock called lava, as well as ash and steam.
Earthquake	An earthquake is a shaking of the ground caused by movement of the Earth's crust.
Plate tectonics	Plate tectonics is the way that large pieces of the Earth's surface move slowly around.
Boundary	The boundary of an area of land is an imaginary line that separates it from other areas.
Epicentre	The epicentre of an earthquake is the place on the Earth's surface directly above the point where it starts.
Vibration	Shakes with lots of small, quick movements.

Knowledge facts

The layers of the Earth are - crust, mantle, outer core and inner core.

The crust is the thinnest layer.

The outer core is made of molten rock.

The inner layer is a huge metal ball.

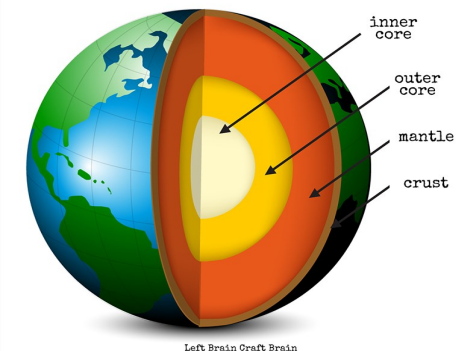
Tectonic plates are large pieces of the Earth's crust that are constantly moving at a slow rate of 1cm to 10cm per year.

People live near volcanoes because steam from volcanoes is used to produce energy. They also attract tourists and therefore jobs, lava can be mined and can contain precious metals. The area around is very good for farming.

Buildings in earthquake zones are designed and constructed to be earthquake resistant, for example concrete walls are reinforced with steel. Roofs are also made as light as possible with heavy sections closer to the ground.

Flooding can be caused by long or heavy rainfall, relief (slope of the land), geology (permeable or impermeable soil/rocks), vegetation and land use (tarmac, concrete and drains increase the risk of flooding).

LAYERS OF THE EARTH



Natural Disasters in the World Case Study: Boscastle:

Causes:

The village of Boscastle saw a months worth of rainfall in two hours. Boscastle is also located where three rivers meet. These factors led to a flash flood which caused over one thousand homes, cars and businesses to be swept away and damaged.

Prevention:

To prevent this type of flood happening again, the environmental agency invested £10 million into several flood defences, such as:

- 1) Widening and deepening the river channel - this allowed the river to carry more water.
- 2) Removing low bridges and replacing them with wider bridges - this meant large amounts of water could flow freely underneath the bridge and the bridge wouldn't act like a dam (in the 2004 flood, vegetation and debris became blocked, creating the effect of a dam).
- 3) Raising the car park and using a permeable surface - this allowed cars to be much higher and so they were less likely to be swept away.
- 4) Tree management - dead trees were removed to prevent them being swept away, causing blockages under bridges. Land owners were encouraged to maintain vegetation and plant new trees.



Tectonic Plates

