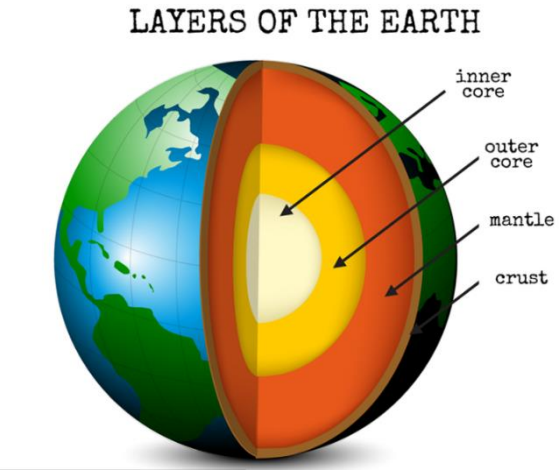
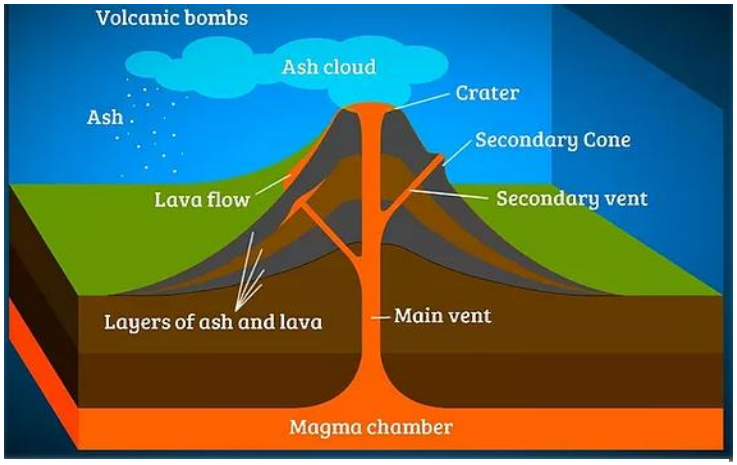
River Bank Primary Knowledge Organiser	Year Four	Autumn 2	Geography – Earthquakes and Volcanoes
Key Vocabulary		**Important Facts**	

Geography: the study of places and their relationship with people
Crust: the layer of rock on the outside of the Earth.
Mantle: a thick layer of rock inside the Earth, which becomes molten-rock (magma) as it nears the outer-core.
Magma: molten rock and minerals underneath the surface of the Earth.
Lava: molten rock and minerals that has erupted through the Earth's surface.
Tectonic Plates: large areas of the crust and mantle which 'float' on the liquid magma underneath.
Fault: a crack in the surface of the Earth.
Volcano: a mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust
Active volcano: a volcano which has erupted in the last 10,000 years.
Dormant volcano: a volcano which has not erupted in the last 10,000 years.
Earthquake: a powerful shockwave caused by tectonic plates slipping past each other.
Tsunami: a powerful movement of water in the sea caused by an earthquake.
Earthquake-resistant: things which have been designed to withstand earthquakes such as building or roads.
Richter-Scale: the scale used to measure how powerful an earthquake is.

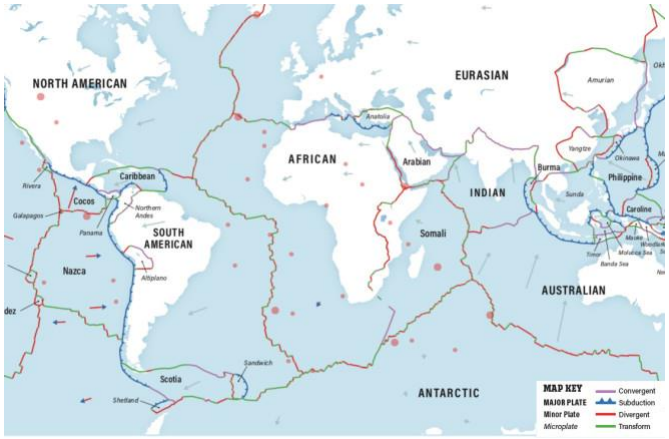
- The Earth is divided into 4 layers: inner-core; outer-core, mantle; and crust.
- The crust is an outer layer of rock.
- The mantle is an inner layer or rock, which becomes molten as it nears the outer core.
- That the Earth's crust and mantle are divided into large tectonic plates which 'float' on the liquid rock underneath. This causes them to move slowly (a few cm a year)
- Faults are cracks in the surface of the Earth
- Volcanoes are formed on the edge of tectonic plates where there are faults. Magma bursts through the Earth's crust turning into lava and then cools.
- The domes of volcanoes are created by lava cooling.
- Mount Vesuvius (Italy) and Anak Krakatoa (Indonesia) are examples of volcanoes erupting which has caused effects such as: loss of life; fertile soil; attraction of tourists; heat generation
- That earthquakes are caused when tectonic plates slip against each other. These are examples of physical geographical features.
- Earthquakes can cause: Tsunamis, loss of life, loss of homes, loss of infrastructure.
- Earthquakes are measured using the 'Richter Scale'
- People who live in areas with frequent or powerful earthquakes have adapted to this by: building earthquake resistant buildings, earthquake resistant roads and having Tsunami warnings. These are examples of human geographical features.

Image Bank





Layers of a Volcano



Techtonic Plate

Mount Vesuvius

Arak Krakatoa (Indonesia)

Eathquake Resistance	
https://www.re-thinkingthefuture.com/fresh-perspectives/a1751-10-earthquake-resistant-building-techniques-used-by-architects-around-the-world/ Earthquake-resistant building designs https://www.youtube.com/watch?v=9N8iQ9Ch8nw How earthquake resistant buildings work	