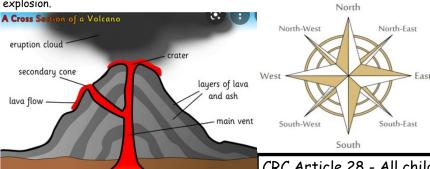
## Year 4: Why does Italy shake and roar?



Italy has active volcanoes such as Etna, Stromboli and Vesuvius.

Volcanoes erupt when molten rock, called magma, rises to the surface. Magma is formed when the earth's mantle melts. Melting may happen where tectonic plates are pulling apart or where one plate is pushed down under another. As the magma rises, bubbles of gas form inside it. If magma is thick, gas bubbles cannot easily escape and pressure builds up as the magma rises. When the pressure is too much an explosive eruption can happen, which can be dangerous and destructive. Runny magma erupts through openings or vents in the earth's crust before flowing onto its surface as lava.

Another way an eruption happens is when water underneath the surface interacts with hot magma and creates steam. This can build up enough pressure to cause an explosion.



nagma chamber



Use the eight points of the compass to give directions and locations. The extra points always start with North or South.

Using 4 figure grid references, go along (horizontal) first, then up (vertical) second. Remember this by 'along the corridor and up the stairs'.

CRC Article 28 - All children have the right to learn.



## Vocabulary

Human Geography: man made (shops, buildings, bridges, schools) Physical Geography: made by earth (rivers, seas, beaches, mountains, hills)

ash	A powdery residue left after burning a substance.
bay	A broad inlet of the sea where the land curves inwards.
crater	A large, bowl shaped cavity in the ground.
earthquake	A shockwave caused by the movement of tectonic plates.
epicentre	The central point of something.
eruption	A sudden and violent outburst of molten rock and steam from the ground
fertile	Capable of producing lots of vegetation or crops.
key	A list of symbols, colours or names next to a map.
landmark	An object or feature that is important to a place.
lava	Hot molten or semi fluid rock.
magma	Hot fluid material below or within the earth's crust.
peninsula	A piece of land jutting out into the water.
plate boundary	Where two pieces of the earth's crust meet.
population	The amount of people living in a certain area.
Richter Scale	A numerical scale to show the magnitude of an earthquake
seismic	Relating to earthquakes or vibrations of the earth's crust.
symbol	Images or drawings to keep a diagram or map tidy and easy to read.
tectonic/ tectonic plates	The structure of the earth's crust and processes taking place in it. The big pieces of the earths crust or outer shell that float on the earths mantle.
vegetation	Plant life as a whole within a certain area.
vent	An opening that allows air, gas or liquid to pass out.
volcano	Opening to the earth's crust, allowing magma and gases to escape.