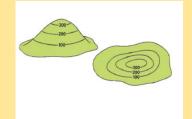
### Extreme earth!

# What causes mountains to form, volcanoes to erupt and earthquakes to happen?

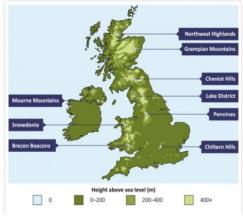
Vocabulary	Definition		
altitude	The height above sea level.		
Active	Still able to erupt		
avalanche	A large amount of snow that quickly		
	moves down a mountain or slope		
crust	The outermost layer of the earth.		
Core	The centre of the earth.		
Dormant	Not active		
eruption	When something explodes and spills		
	out its contents		
epicentre	The point on the earth's surface that is		
	directly above the main part of an		
	earthquake.		
Extinct	Will never erupt again		
gorge	A narrow valley with steep walls, found		
	between hills or mountains.		
Fault	A crack in the Earth's surface		
lava	Hot, liquid rock that flows from a		
	volcano.		
magma	Hot, liquid rock located deep below the		
	earth's surface.		
magnitude	The size of something		
Mantle	The layer between the crust and the		
	core.		
range	A series of mountains next to eachother		
	in a line		
ridge	The top line of a mountain range		
Richter scale	The scale used to measure the size of an		
	earthquake		
Seismic	The waves of energy caused by		
waves	earthquakes that can be measured		
summit	The highest point of a mountain.		
Tsunami	Huge ocean waves caused by		
	earthquakes		
tectonic plate	Pieces of the earth's crust connected		
	together.		

Fold mountains	Fault-block mountains	Volcanic mountains	Dome mountains	Plateau mountains
Tectonic plates collide and rock is pushed up.	Cracks in the earth's surface open up, some chunks of rock are pushed up, some down.	Formed around volcanoes and made of layers of ash and cooled lava.	Formed when magma is forced upwards but doesn't ever flow out of the crust.	Materials taken away through erosion leave deep valleys or gorges next to high cliffs.
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<u>Contours</u> are lines on a map that show the height of the land. The closer together the contours, the steeper the mountain.



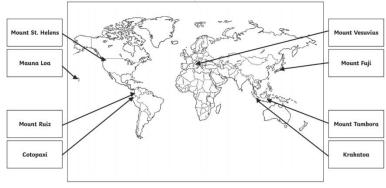
### UK mountain ranges and hills

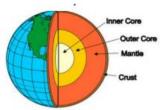




## Where are the famous Mountains & Volcanoes

Mount Vesuvius (Italy/Europe) Krakatoa (Indonesia /Asia) Mount St. Helens (Washington/USA) Mount Tambora (Indonesia/Asia) Mauna Loa (Hawaii/USA) Eyjafjallajokull





#### What is a Tsunami?

- A tsunami is a giant wave caused by a huge earthquake under the ocean.
- The earthquake causes a large amount of water to be displaced very quickly causing a series of waves.
- As the waves travel through shallower water near land, they get bigger and bigger.



#### What causes Earthquakes?

- Earthquakes are caused when the earth's tectonic plates suddenly move.
- Most earthquakes occur near the



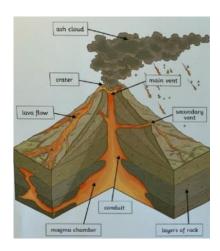
#### Why do people live near volcanoes?

People choose to live in volcanic areas despite the risks of an eruption. Volcanoes can provide people with many benefits such as:

- Volcanic rock and ash provide fertile land which helps crops to grow.
- Tourists are attracted to the volcano,
  which increases money to the area
- Geothermal energy provides cheaper electricity.
- Minerals are contained in lava, eg diamonds these can be mined to make

# Are there any active Volcanoes in Europe?

- Mount Vesuvius is the only active Volcano in Mainland Europe.
- It is located in Italy.
- Despite being the only active volcano on mainland Europe, and one of the most dangerous volcanoes, almost 3 million people live in the immediate area.



#### What are Volcanoes?

- Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing magma to sometimes erupt through it.
- Active volcanoes have erupted in the last 10 000 years.
- Dormant volcanoes haven't erupted in the last 10 000 years but may erupt again.
- Extinct volcanoes aren't expected to

#### How do people use mountains?

More than 50 million people visit mountains each year.

Many mountain towns around the world depend on tourists to support them. People in the town provide food and lodging for tourists who come to enjoy the nearby mountains.

Typical mountain activities: Mountaineering/Paragliding,

Summer Activities: Walking/hiking/bird watching/rafting/Mountain Biking Winter Activities: skiing,/snow boarding,/Sledging / Tobboganing/Icefall

climbing/Snow-Shoe Trekking/Winter walking/Ice skating