## **Volcanoes and Earthquakes**

## Big Question: What is living in the Ring of Fire like?

		Vocabulary	Composite Volcano: Steep sides and	
1	continent	One of the 7 large landmasses of the Earth.	made up of lots of layers of volcanic rock	
2	volcano	An opening in the Earth's crust that allows	Made from a series of eruptions that have	
		magma, hot ash and gases to escape.	occurred over thousands of years.	
3	earthquake	A sudden, violent movement of the Earth's	Mount St. Helens, Washington, USA	
		crust due to movement of the Earth's tectonic		
		plates. Earthquakes can happen along any		
		type of plate boundary.	Company and a second and	
4	erupt	When a volcano ejects hot lava and gases.	Miller Carrows and and	
5	active volcano	Erupting or likely to erupt in the future.		
6	dormant volcano	An active volcano that is not erupting.	Mount Vesuvius, Pompeii	
7	extinct volcano	Has not had an eruption for at least 10,000		
		years.		
8	magma	Hot liquid rock under the Earth's surface.		
9	lava	Magma once it reaches the Earth's surface.		
10	lithosphere	The crust and upper mantle.	Land Land Land	
11	epicentre	The point on the Earth's surface directly	T I HE FAR	
		above an earthquake.		
12	seismic waves	Vibrations generated by an earthquake.		
13	seismograph	Records the seismic waves caused by an	Ring of Fire: A chain of volcanoes	
		earthquake.	surrounds the Pacific Ocean. Because	
14	aftershock	Smaller earthquakes that follow a large	the volcanoes frequently erupt in fiery	
		earthquake.	explosions, the region is known as the	
15	tsunami	Giant waves caused by earthquakes.	Ring of Fire. Many earthquakes occur	



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Mantle Extremely hot rock that flows. 3000km thick.

## **Outer core**

Iron and nickel. Mostly liquid with some rocky parts. 4000°C.

## Inner core Iron and nickel. Hottest layer at over 5000°C.

Shield Volcano: Shallow, sloping e up of lots of layers of volcanic rock. sides. Built up over time by flow e from a series of eruptions that have after flow of runny lava. They also form primarily on the ocean floor. Mauna Kea, Hawaii

Cinder Cones: Circular or oval cones. Made from small fragments of lava which are blown into the air through a single vent. Not usually dangerous or very big. Sunset Crater, Arizona USA





ng of Fire: A chain of volcanoes rounds the Pacific Ocean. Because volcanoes frequently erupt in fiery plosions, the region is known as the g of Fire. Many earthquakes occur here too.



**Tectonic plates:** The lithosphere is broken into large, rocky plates. They sit on partially molten layers of rock. These boundaries are invisible. Most tectonic activity takes place where these plates meet. They collide, tear apart or slide against each other. Earthquakes and volcanic eruptions happen at the boundaries between plates.



Year 4 Summer 1 knowledge organiser