### **Knowledge Organiser**

### Asia: Mountains, Volcanoes and Earthquakes



### What and where is Asia?

Asia is one of the seven continents and is made up of 48 countries. Asia is the largest continent and covers 30% of Earth's total land area. It is located in the Eastern and Northern Hemispheres.



A **volcano** is an opening in the Earth's crust that allows magma, hot ash and gases to escape. Volcanoes can look like mountains or small hills, depending on what type they are.



A **mountain** is a geological landform that rises above the surrounding land. Most geologists classify a

mountain as a landform that rises at least 1,000 feet

(300 metres) or more above its surrounding area.

### What are the tectonic plates?

The Earth's lithosphere is made up of large pieces called tectonic plates. They are invisible boundaries. 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, and the crust may 'crumple' to form mountain ranges.



An **earthquake** is the shaking and vibration of the Earth's crust due to movement of the Earth's tectonic plates. Earthquakes can happen along any type of plate boundary.



## **Significant Places**



# **Himalayas**

The Himalayas are the tallest mountains in the world. This mighty range stretches 1,500 miles from east to west, across Bhutan, Nepal, India, Tibet, China, Pakistan, and Afghanistan.



#### **Anak Krakatoa**

Anak Krakatoa means "Child of Krakatoa". It grew from the remains of Krakatoa, whose eruption in 1883 was one of the deadliest volcanic eruptions of modern history. It is estimated that more than 36,000 people died.

### Asia

Asia is the largest of the seven continents on Planet Earth in area and population. Asia borders Africa and Europe to the west and the Pacific Ocean to the east

#### **Mount Everest**

Mount Everest is the tallest mountain at 29,035 feet tall, that's five-and-ahalf miles high! It borders China and Nepal. It takes around 10 weeks to climb Mount Everest, but you have to train for it. The climate is very harsh. The warmest temperature there is -20°C!

Glossary		
1	physical feature	a physical feature occurs naturally on the earth
2	human feature	a human feature is something which has been created or built by humans
3	border	a border is something that separates geographic areas. They can be natural or manmade
4	Alfred Wegener	a scientist who developed the theory of continental drift
5	lithosphere	the solid crust and the top, stiff layer of the mantle broken into pieces called tectonic plates
6	Inner core	the centre and hottest part of the Earth
7	outer core	the layer surrounding the inner core
8	mantle	the widest section of the Earth made of magma and rock
9	crust	outer layer of the Earth
10	summit	the top of the mountain
11	magma chamber	a collection of magma inside the Earth, below the volcano
12	main vent	the main opening for the magma to escape
13	secondary vent	smaller openings, usually at the sides of the volcano, where magma escapes
14	crater	created after an eruption blows the top off the volcano
15	lava	magma turns to lava when it hits the Earth's surface
16	hypocentre	the point where an earthquake starts below the Earth's surface
17	epicentre	where the earthquake is the strongest
18	seismic waves	energy that is released from an earthquake
19	seismograph	a device used to measure the magnitude (strength) of an earthquake
20	aftershock	a smaller earthquake that happens in the same area after the main earthquake

### **Significant Places**



### smallest country in Asia. It is made up of 1,200 islands and people live on only 200 of them. The Maldives is a very low-lying country. The highest points on the island are only five feet above sea level. Scientists worry that if sea levels rise due to global warming, the islands may disappear completely.

## called the Chang Jiang.

It is the longest river in Asia, and the third longest in the world. The river is one of the busiest in terms of traffic. Ships use it to transport coal and manufactured goods. Passenger ships also use he river, and Yangtze River cruises are become quite a big tourist attraction.

awoke in 2010 after a 400-year sleep and is currently one of the most active volcanoes in Indonesia. It has been in almost constant eruption since September 2013, and there are still frequent volcanic earthquakes.

earthquakes. A magnitude 7.8 earthquake struck Nepal in 2015. In the capital, Kathmandu buildings collapsed, and it created landslides and avalanches in the Himalaya Mountains. Nearly 9,000 people died and more than 22,000 suffered injuries. It was the deadliest earthquake in 81 years.