

Spring 1 - How can the weather cause so much trouble?

Key Events and Facts

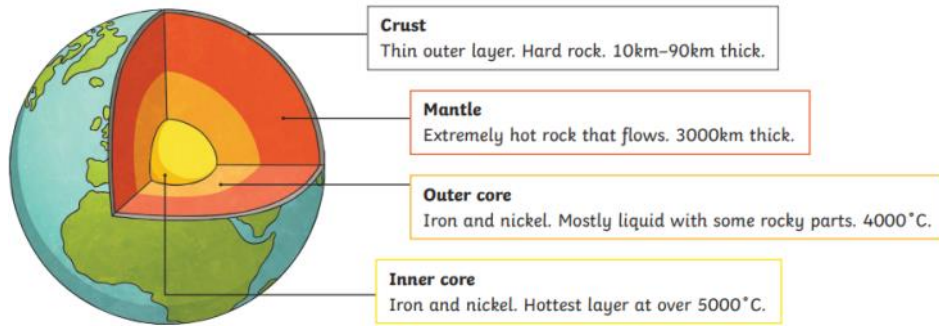
What causes a volcano?	<p>Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing magma to sometimes erupt through it.</p> <ul style="list-style-type: none"> Earth's outer layer is called the crust. It varies in thickness from 0 – 60km thick. It is not even and is made up of pieces which overlap to cover the entire planet. These pieces are called 'tectonic plates'. The 'Ring of Fire' is an area of the Pacific Ocean that is shaped like a horseshoe. It is home to 75% of the world's volcanoes. It contains a string of 452 volcanoes, which stretches from the southern tip of South America, up along the coast of North America, down through Japan, and into New Zealand.
What causes tropical storms?	<p>The heat from the ocean surface provides energy to warm the overlying air. It also provides a lot of water vapour which is absorbed by the air. The heat warming the air causes it to rise; this will continue as long as the air stays over the warm water. As the air rises, it cools and water vapour condenses to form clouds. When it changes from a gas back to a liquid it releases the energy it absorbed when it evaporated back into the surrounding air as heat. This means the air gets a second heating and it rises again even higher within the atmosphere.</p>
What causes a tsunami?	<p>Tsunami is a Japanese word. It means 'Harbour Wave'. A tsunami is a giant wave caused by a huge earthquake under the ocean. 80% of tsunamis happen within the Ring of Fire. The tectonic plates that cover the Earth grind together. Sometimes the plates get stuck; the pressure builds up and they suddenly slam into a new position. This causes an earthquake. If an earthquake lifts or drops part of the ocean floor, the water above rises and starts spreading across the ocean, causing a tsunami.</p>

Key Vocabulary

Cumulonimbus cloud	Large thunderstorm clouds.
Tectonic plates	The earth's crust is made up of large areas called tectonic plates that join together.
Tsunami	A tsunami is a giant wave caused by a huge earthquake under the ocean.
Earthquakes	Earthquakes are caused when the earth's tectonic plates suddenly move. Most earthquakes occur near the tectonic plate boundaries.
Tornado	A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big cumulonimbus clouds.

Key texts





Science

- I know how to ask relevant scientific questions
- I know how to set up a scientific enquiry to explore a scientific question
- I know how to set up a fair test and know why it's fair
- I can gather, record, classify and present data in different ways

Geography

- To explore water sources and uses
- To understand the water cycle
- To investigate flooding and drought
- To explore extreme weather

DT

- To learn about inventors, designers and engineers of ground breaking products
- To produce a plan and create an annotated sketch
- To select suitable tools and equipment
- To explain choices based on required techniques, to measure, mark, cut and shape materials
- To refer to design criteria during the making process

Computing

- To explain that the composition of digital images can be changed
- To explain that colours can be changed in digital images
- To explain how cloning can be used in photo editing
- To combine images
- To evaluate how changes can improve an image

PSHE

- Hopes and dreams
- Overcoming disappointment
- Creating new, realistic dreams
- Achieving goals
- Working in a group, celebrating contributions

Maths

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| <ul style="list-style-type: none"> • To recognise and use factor pairs and commutativity in mental calculations • To recall multiplication and division facts for multiplication tables up to 12×12 • To multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000 | <ul style="list-style-type: none"> • To solve problems involving multiplying and adding, including using the distributive law to multiply 2-digit numbers by 1 digit • Convert between different units of measure (for example, kilometre to metre; hour to minute) • Measure and calculate the perimeter of a rectilinear figure (including |
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