# Tremors

## Imaginative learning project for year 3 and 4

Tremors. Overwhelming and mighty. Mother Nature's awesome energies hiss and roar deep within the Earth. Plates collide, spewing lava. Rocks rain down and mud slides in torrents. Towns and cities vanish under ashen clouds. Discover the dangerous and ferocious world of natural disasters and glimpse their savage and deadly effects. Visit the ancient city of historic Pompeii, frozen in time, then create blistering explosions from model volcanoes that fire foamy lava. Discover the properties of rocks shaped by the Earth's breaktaking power. Watch out!

## Geography and Science Focus. Key Facts:

- The Earth is made of different layers. The inner core is made mostly of solid iron, and the outer core is made of liquid iron and nickel. The mantle is made of solid rock and liquid rock called magma.
- Significant geographical activity includes earthquakes and volcanic eruptions. These are known as natural disasters because they are created by nature, affect many people and cause widespread damage.
- A tsunami is a huge tidal wave which can often lead to widespread destruction
- Over three-quarters of the world's earthquakes and volcanic eruptions happen along the 'Ring of Fire'. The Ring of Fire runs around the edge of the Pacific ocean and is where many plate boundaries in the Earth's crust converge
- A volcano is an opening in the Earth's surface from which gas, hot magma and ash can escape. They are usually found at meeting points of the Earth's tectonic plates
- When a volcano erupts, liquid magma collects in an underground magma chamber. The magma pushes through a crack called a vent and bursts onto the Earth's surface
- Lava, hot ash and mudslides from volcanic eruptions can cause severe damage

## Key Vocabulary

⇒ Compression: when materials in the Earth's crust push and squeeze against one another as more materials are deposited on top and the pressure increases

⇒ Earthquake: a violent sudden shaking of the ground that can cause lots of damage and destruction. The movement of the Earth's tectonic plates or volcanic eruptions cause earthquakes

⇒ Epicentre: the exact location on the Earth's surface that is directly above an earthquake

⇒ Hurricane: a violent wind that forms over warm ocean waters, such as the west Atlantic ocean and moves in a large circle

⇒ Igneous: a type of rock that forms when molten rock cools and turns back into a solid. Examples of igneous rock include pumice and obsidian

⇒ Magma: molten rock found under the Earth's surface

## Homework Projects

♦ Design a poster to show a volcano's main features. Make sure you label its important parts

♦ Research a volcanic eruption of your choice. Produce a fact file about the eruption including: a sketch map to show its location, a description of the eruption, an explanation of why it erupted, details about the eruption's impact (both short and long-term)

♦ What is the Richter scale?

♦ Design an earthquake-proof house. How could you prevent the building from collapsing during an earthquake?

♦ Create a project dictionary that explains key volcano vocabulary in your own words