

Discover...

Volcanoes

Key Facts

- A volcano is an opening in the Earth's crust where the melted rock comes up to the surface.
- When the melted rock escapes the inside of the volcano, it is called an eruption. These can be very gentle or can be explosive.
- Active volcanoes have recently erupted or are likely to erupt in the near future. Dormant volcanoes have stopped erupting but may do in the future. Extinct volcanoes will never erupt.
- The liquid rock inside a volcano is called magma. When it is on the surface it is called lava.
- Active volcanoes can be dangerous to live near, but the lava is rich in minerals so the land near a volcano is very good for growing fruit and vegetables.
- Volcanoes can be found on other planets too. The largest volcano in the Solar System is Olympus Mons on Mars. It is three times as high as Mount Everest.

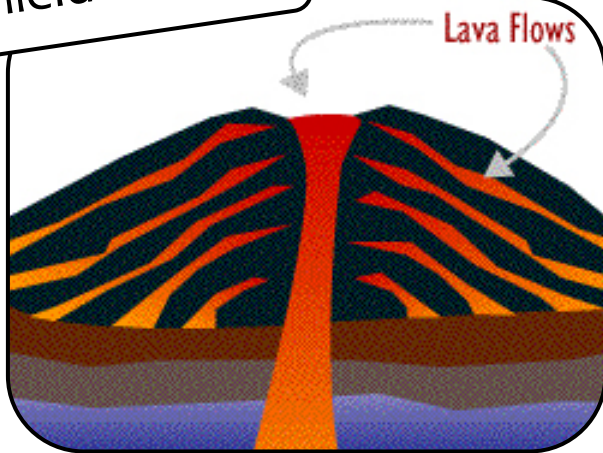


Where to find more:

- Britain has a number of extinct volcanoes. Find out about them here: <https://www.countryfile.com/go-outdoors/historic-places/britains-most-amazing-extinct-volcanoes/>
- Explore volcanoes on other planets on the NASA website:: <https://spaceplace.nasa.gov/volcanoes/en/>
- The Geological Society website has activities and factsheets for all ages, including a lava flow experiment to try: <https://www.geolsoc.org.uk/volcanoes>
- Want to know why there are no active volcanoes in Britain? Check out the British Geological Survey factsheets for the answer: <https://www.bgs.ac.uk/downloads/browse.cfm?sec=8&cat=51>

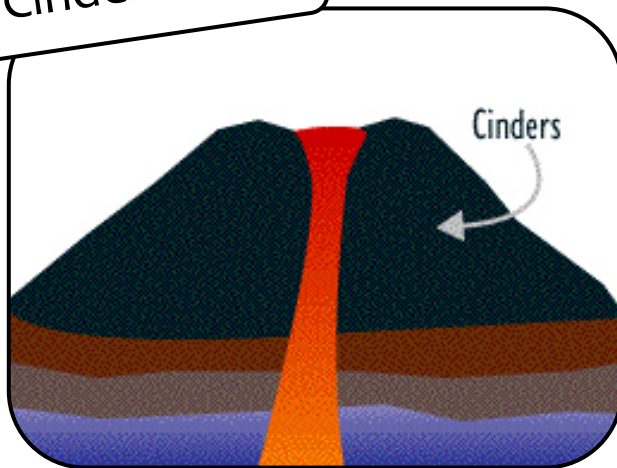
Types of Volcano

Shield Volcano



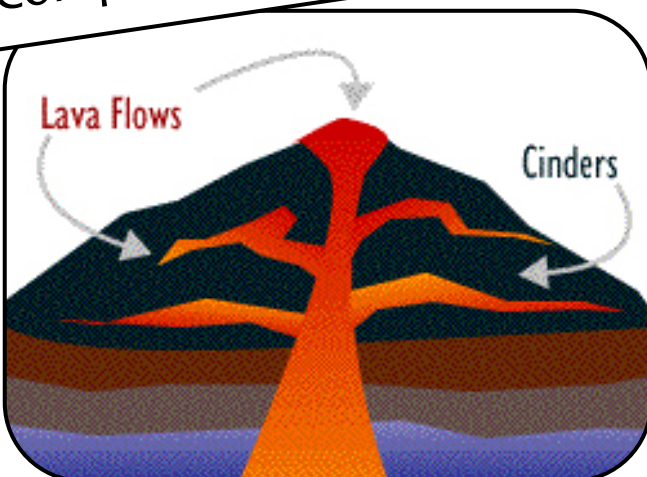
Shield volcanoes occur when the lava is very runny and spreads out to a wide area. This forms a volcano with gentle slopes.

Cinder Cone



Cinder cone volcanoes are made from very loose material that builds up around a volcanic vent. They are relatively small and have a crater at the top.

Composite Volcano



Also called a Stratovolcano. Layers of rock and ash build up to create a hard steep cone. A composite volcano has a very explosive eruption.

How to Make:

A Model Volcano

You will need:

A piece of card for the base

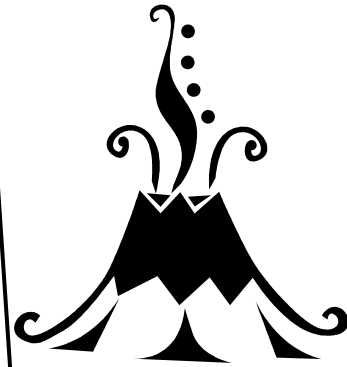
Newspaper

Tape

Scissors

Glue

Tissue paper and paper to decorate



1. You first need to make your Volcano shape. Tear some newspaper off into wide strips and scrunch it up, then twist it around into a ring shape. Make this first ring the biggest—it should just fit into your card base.
2. Fix this ring to your base with some tape.
3. Now make another ring shape with the newspaper, but coil it a bit tighter so it is smaller, and fix this ring on top of the first one with tape.
4. Repeat this again and again, making each ring smaller than the one before, until you have a good volcano shape.
5. You are now ready to decorate your volcano. Use tissue paper and glue to cover the newspaper with. Don't forget to include lots of molten lava and fire!
6. Your volcano is now complete. If you like, you can decorate the base further with trees and vegetation.

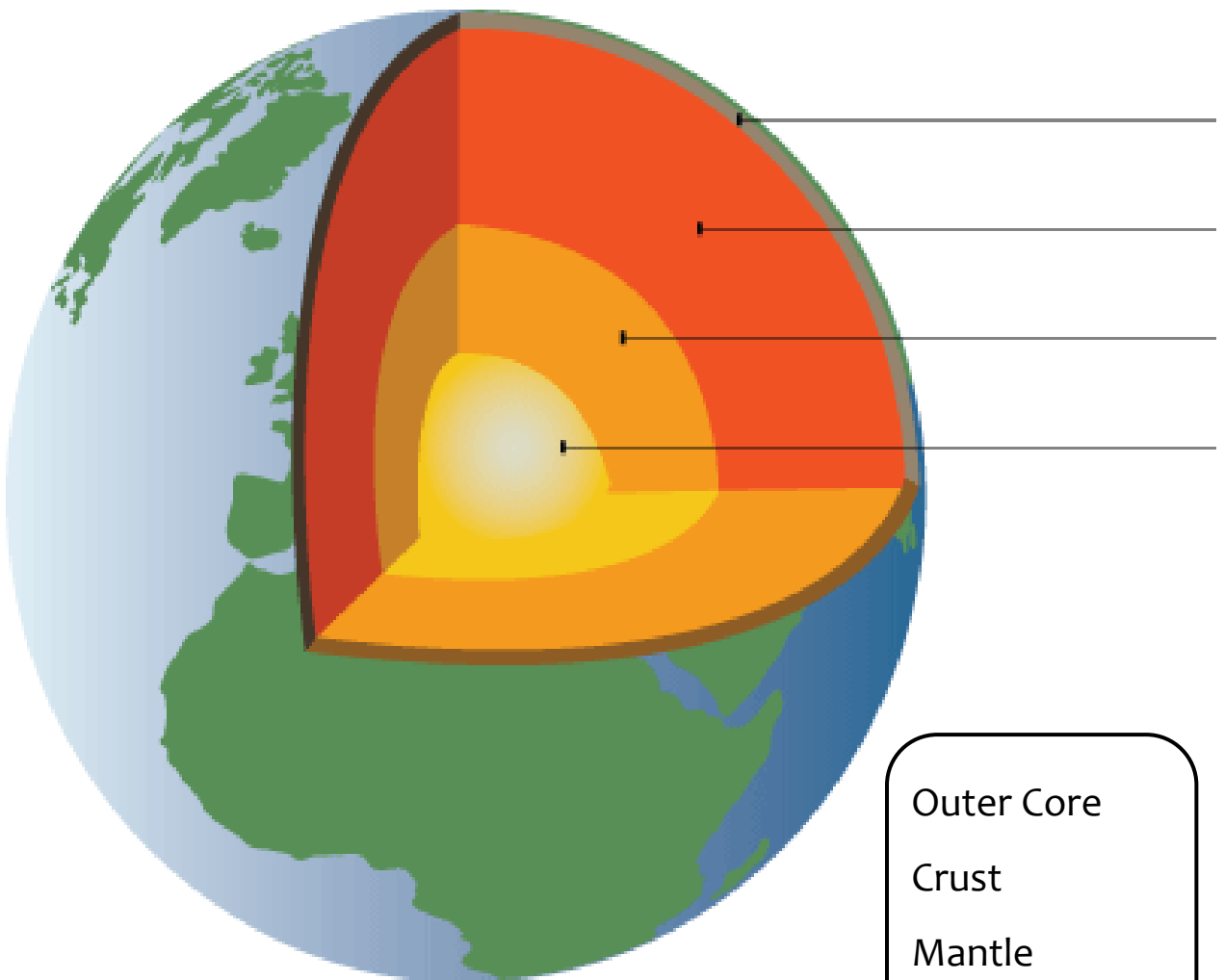
The Earth's Layers

The earth is made up of four main layers of rock. There is inner core, outer core, mantle and crust.

The crust is made up of tectonic plates, which are in constant motion. Earthquakes and volcanoes are most likely to occur at these plate boundaries.

The tectonic plates move apart due to currents inside the earth and as the plates move apart, magma (which is molten rock) rises from the mantle, which is very hot and erupts out of volcanoes.

Can you label this diagram of the earth?



Outer Core

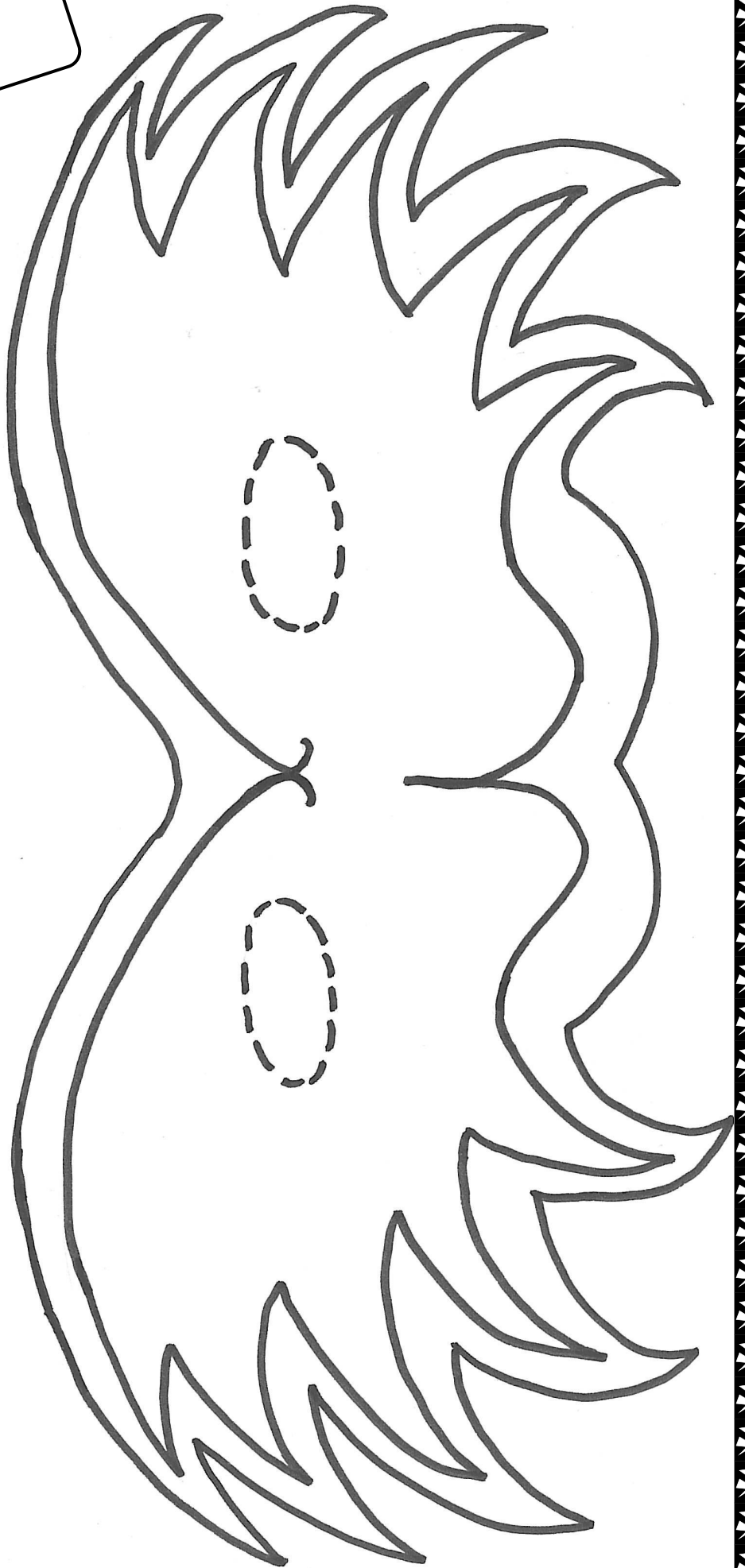
Crust

Mantle

Inner Core

Vulcan Mask

Vulcan was the Roman god of fire and was the blacksmith of the gods and an underworld god. Romans believed that he lived inside a volcano and that when he got angry he would heat up his furnaces and make the volcano erupt. The word 'volcano' comes from his name. Colour in and make this fiery Vulcan mask to wear.



Colouring In

