

## Bardon Hill Quarry

Bardon Hill Quarry is in north-west Leicestershire in the East Midlands where the rocks have been extracted for more than 400 years. The quarry is on private land, but there are footpaths around its edges from where you can view the mining activity. Quarries are dangerous places and you should not attempt to enter.

Bardon Hill rocks formed from a volcano in Precambrian times, about 570 million years ago.

The volcanic rocks are called andesite and its eruptions were similar to those recently witnessed on the island of Montserrat in the West Indies.

### About Bardon Hill Quarry

The modern quarry is about 800 m across.

It produces about three million tonnes of crushed rock per year, which is around 15% of a normal year's production for the whole of the UK.

This rock is valued for its properties when it is crushed and is used to build roads and for the foundations of buildings.

### Did you know?

Bardon Hill is a Site of Special Scientific Interest (SSSI) because it has veins of quartz containing native copper and gold. It is also an unconformity; in the Triassic, the ancient land surface of Precambrian volcanic rocks had been eroded to form deep valleys called 'wadis' and these were infilled by red coloured desert sediments. Further Bardon Quarry SSSI information is available from [www.naturalengland.org.uk](http://www.naturalengland.org.uk).

Other facts:

- Bardon Hill is home to the rare Charnwood red spider.
- Bardon Hill is the highest point in Leicestershire (278 m).
- It takes about 60 tonnes of aggregate to build one house.



*The volcanic rocks of Bardon Quarry are called andesite and its eruptions were similar to the ongoing eruptions on the island of Montserrat, West Indies.*



*Bardon quarry from Bardon Hill.*

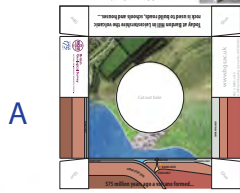
# Bardon Hill Quarry Volcano Model

A. Base

(not to scale)



What you will need:



1. Cut around the 2 parts of the model — you may need to get an adult to help you  
A. Base  
B. Volcano and quarry
2. **Base:** cut out the hole in the middle of the base. Fold along the thick black lines and glue tabs to make-up the model like a box lid. Allow to dry.
3. **Volcano and quarry:** fold as shown in the images on page 2 and glue the tabs.
4. Glue the volcano and quarry to the base as shown in the image on page 2.

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Glue	<p>Today at Bardon Hill in Leicestershire the volcanic rock is used to build roads, schools and houses...</p>	Glue
<p>celebrating 175 years</p> <p>British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL</p>	<p>Cut out hole</p>	<p>www.bgs.ac.uk</p> <p>BGS © NERC, 2010 © UKP/Getmapping Licence No. UKP2006/01</p>
Glue	<p>OCEANIC CRUST</p> <p>SUBDUCTION ZONE</p> <p>VOLCANO</p> <p>MAGMA RISES</p> <p>ROCKS MELT</p> <p>CONTINENTAL CRUST</p>	Glue
<p>About 570 million years ago a volcano formed...</p>		



# Bardon Hill Quarry Volcano Model

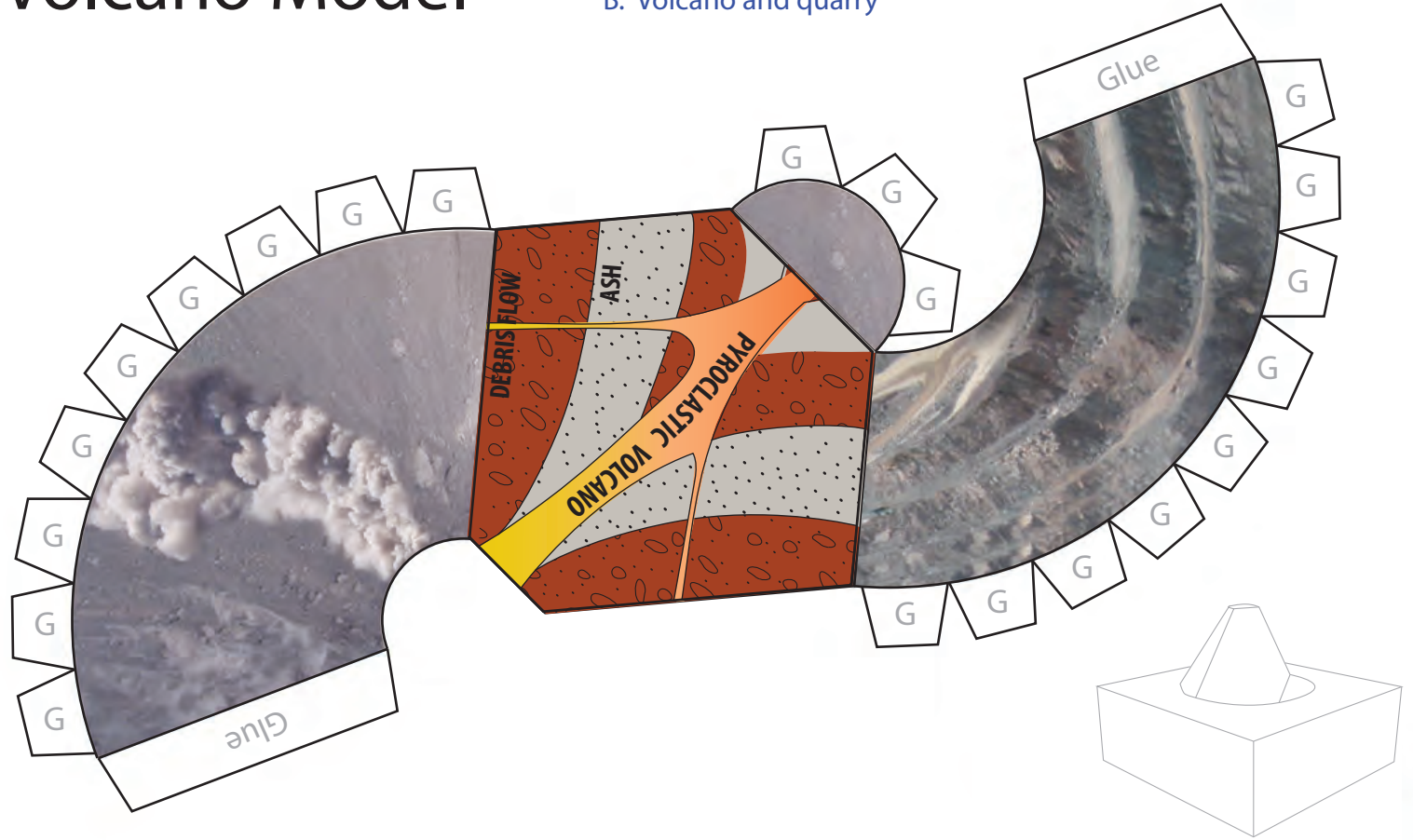
B. Volcano and quarry

(not to scale)

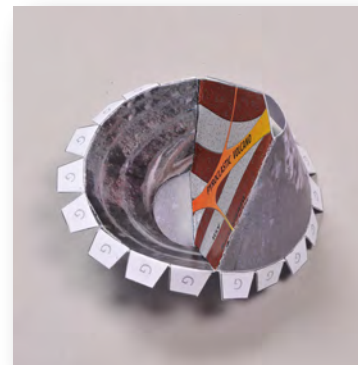
1. Cut around the 2 parts of the model



2. Making the base



3. Assembling the volcano and quarry



4. The finished model

