

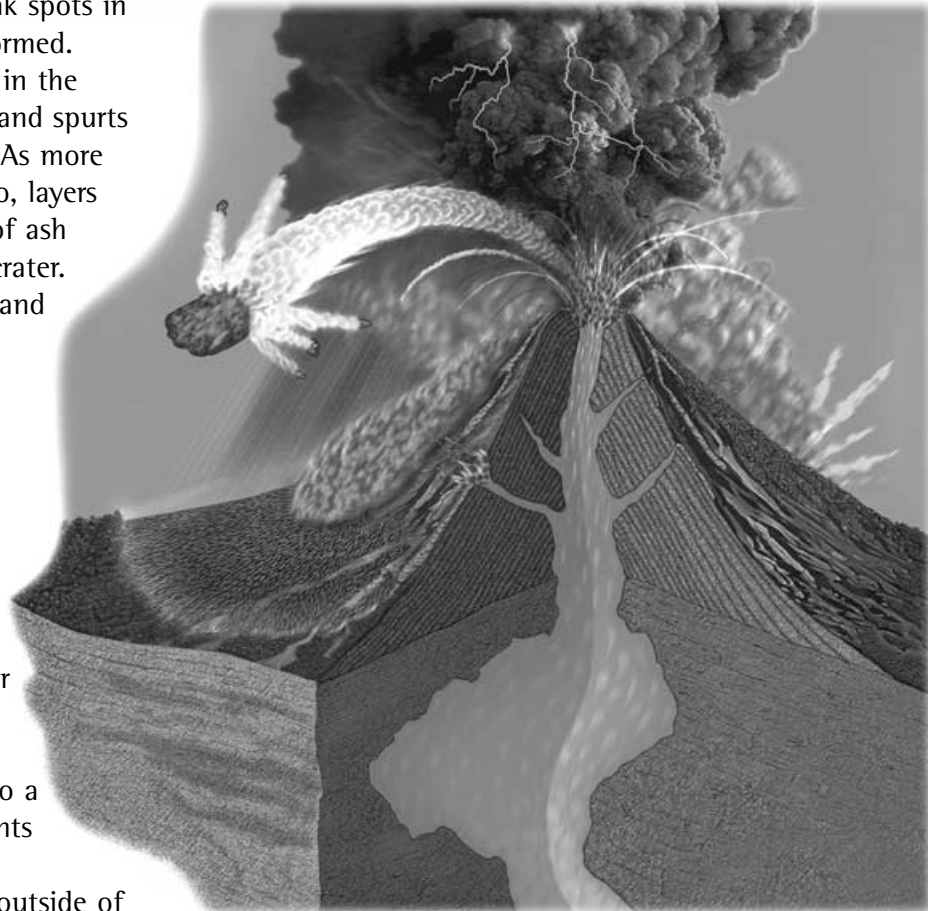
## Discovery Worksheets

## Make a volcano

When magma pushes through weak spots in the Earth's crust, a volcano is formed. Magma travels through layers of rock in the crust before it loses some of its gases and spurts out of the crater in the form of lava. As more and more lava spews from the volcano, layers build up around the crater. Deposits of ash and dust also form layers around the crater. In this way, volcanoes change in size and shape. In a really violent explosion, a volcano can lose its entire top!

## Construct a model

1. Use plasticine to make a model of a volcano and the area surrounding it. Use the information from the introduction and the diagram to guide you. Your model should include:
  - (a) the layers in the Earth's crust
  - (b) the magma chamber leading to a central vent and some side vents
  - (c) clouds of dust and ash
  - (d) the layers formed around the outside of the crater
  - (e) lava and the path it will most likely follow in your landscape
  - (f) vegetation that has been affected by the eruption — use twigs to represent trees
  - (g) a nearby township; the residents know of the dangers of the volcano and have built the town in such a way that it will survive an eruption
  - (h) any extra features that you think show how a volcano erupts and the effects of the eruption.



## Describe your model

2. Use labels to name and describe the parts of your volcano.
3. Near the township, use labels to describe the features that help to keep the residents safe. For example, is the town located where lava is most likely going to flow?
4. Describe also how the erupting volcano has affected the vegetation.



*Atlas of Discovery*, pp. 4–5;  
coloured plasticine or playdough;  
twigs; cotton balls (for dust and smoke);  
tools to help shape the plasticine; paper;  
pens or pencils