



In 79AD, one of the most famous eruptions in Europe happened in the Bay of Naples in what is now called Italy. Before the eruption local people noticed many little earthquakes, plumbing and river flow being disrupted and disjointed and smoke rising from the crater of Mount Vesuvius. Pliny the Younger, a 17-year-old Roman administrator and poet who was living across the bay recorded events over two days of violent earthquakes, eruptions and ash falls. It has been estimated that about 16,000 people in and around the towns of Pompeii and Herculaneum died from the ash and pumice falls and volcanic gas clouds that were released from the volcano Mt Vesuvius. People would have died instantly from breathing super heated air and from clouds of carbon dioxide gas. If they were in the open, their bodies were blanketed by ash. Layer upon layer of ash covered everything to a depth of several metres. Roofs collapsed and buildings, streets and squares disappeared. Heat

from the ash vapourised some bodies instantly and others rotted away but their shapes were still retained within the ash that had cooled and solidified.

### **Activity** Pompeii bodies

We will be examining the process by which the Pompeii bodies were copied. Materials per student:

- 1 plastic figure (to represent the body).
- Damp sand (NOT WET.)
- Newspaper to protect the desk.
- Plaster of Paris mix (provided by the teacher).
- Soft brush or tissue to brush off dry sand

#### Method

1. Draw, to scale, and describe the original "body" in the table below.

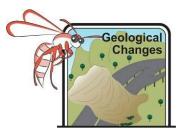
### To create the mould

- 2. Cover the work area with newspaper.
- 3. Firmly press the figure into the sand and then remove carefully.

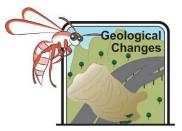
#### To create the cast

- 4. Fill the mould with liquid plaster and leave to dry. This may take 30 minutes.
- 5. Answer the research questions while you are waiting.
- 6. Gently lift out the dried plaster cast and leave to dry for a further five minutes.
- 7. Answer the "discussing the activity" questions.





<u>Observations</u>	
Sketch to scale of body	Sketch to scale of cast
Original body description	Cast of body description
<b>Discussing the activity</b> Is there any difference between the original "body" and its cast? Explain your answer or answers.	
Which kind of volcano must Mt Vesuvius be (strato or shield)? Explain your answer	





### **Research questions**

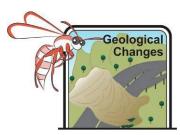
Look at the picture of the volcano above. What kind of volcano must this be? Explain your answer.

### Using an atlas, books and the Internet answer the following questions.

Place Italy on the World map and mark Pompeii on the map of Italy. (HINT Pompeii is in the Bay of Naples



World map





When did this terrible eruption occur?
What was the name of the Roman administrator and historian who wrote about the last two days of Pompeii?
What happened to his uncle?
How did the historian describe the eruption?
What did the local people think was happening?
What did they think caused the eruption?
How was the Earth's surface changed because of this sudden geological change?