



## Igneous Landscapes – Edinburgh

Did you know there is a lump of igneous rock in Edinburgh?

### Summary

Edinburgh castle is built on a granite plug. A volcano erupted in Edinburgh millions of years ago. The volcano became blocked when molten magma cooled and solidified within the vent. Millions of years later the sea level rose and sedimentary rocks were laid down. As the sea level fell again, the softer sedimentary rocks were eroded away leaving the more resistant granite plug as a higher area of land. This became an ideal defence site and a castle was built.

### Check you know the keywords

Edinburgh, granite, volcano, plug, volcanic ash, lava, magma, rock, sea level rise, sea level fall, erosion, resistant rock, defence, sedimentary, settlement

### Watch the video and answer the questions

<http://www.bbc.co.uk/learningzone/clips/3072.html>

1. Look at the lump of igneous rock in Edinburgh. What is on the top of it?
2. Is this volcano going to erupt again?
3. When was there a volcano here?
4. Look inside the volcano: what was the sequence of events?
  - \_\_\_ There was a volcano here
  - \_\_\_ The sea level drops
  - \_\_\_ The sea level rises
  - \_\_\_ The land is eroded
  - \_\_\_ New layers of rock build up
  - \_\_\_ The plug stays sticking up, 70 metres high, because it is made of very hard rock
  - \_\_\_ Inside, there was a huge pipe of molten rock in the middle
  - \_\_\_ The molten rock cools, and goes solid
  - \_\_\_ The Castle was built





**Check your answers**

1. Edinburgh Castle
2. No
3. 350 million years ago
4.
  1. There was a volcano here
  2. Inside, there was a huge pipe of molten rock in the middle
  3. The molten rock cools, and goes solid
  4. The sea level rises
  5. New layers of rock build up
  6. The sea level drops
  7. The land is eroded
  8. The plug stays sticking up, 70 metres high, because it is made of very hard rock
  9. The Castle was built