# Materials and the Earth Lesson 2: Igneous Rocks

Science

Chemistry - Key Stage 3

Miss Willett



#### What have you learnt already?

1. What are the four layers of the Earth?

2. What causes tectonic plate movement?

3. What is a displacement reaction?



#### Properties of igneous rock

Unscramble the properties:

Krda nda nisyh



Ntacions yctlasrs



Cntona eb dtcahsrce



#### Properties of igneous rocks

Draw and label a diagram of a typical igneous rock

Your rock needs **at least**: crystals, sharp edges, no scratches!



#### Igneous rock formation

#### Match the stages!

1

Magma cools on the outside of the volcano and solidifies into rock

2

Magma found in chambers under the Earth's crust

3

Magma released when volcano erupts



### Igneous rocks: formation

Draw and label a diagram to show how igneous rocks are formed



#### **Crystal size**

Which one: extrusive or intrusive?!

Forms if magma cools slowly

Forms in cooler areas

Forms smaller crystals



## **Crystal sizes**

#### Answer the following to show your knowledge of crystal formation:

A volcano erupts. Magma settles at point A (just by the volcano opening) and point B (far away from the volcano opening).

- Describe how rocks will form at point A and B.
- Explain the difference in the size of their crystals.

KEYWORDS: intrusive, extrusive, cool, lava, magma, crystals, larger, smaller



## **Crystal sizes**

Answer the following to show your knowledge of crystal formation:

