

ROCK AND MINERAL FORMATION

Read the theory carefully:

Rocks and minerals make up the **Earth's crust**. Rocks are clusters of **minerals** and other **inorganic materials**. Minerals are structured **crystals** that have specific chemical components.

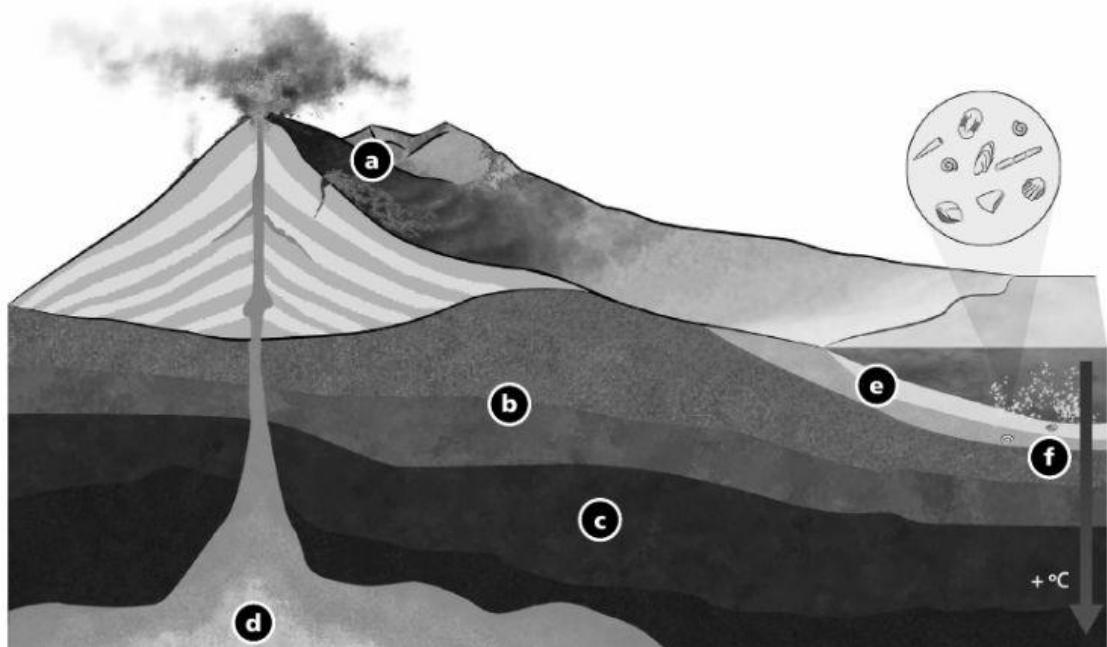
There are three types of rocks: **igneous**, **sedimentary** and **metamorphic**.

IGNEOUS	SEDIMENTARY	METAMORPHIC
<ul style="list-style-type: none">• These rocks form when lava from volcanoes cools and hardens.• If the lava cools quickly, small crystals form and the rock has dots and colour.• If the lava cools slowly, then large crystals form and the rock looks the same color all over.• Granite and basalt are two examples.	<ul style="list-style-type: none">• These rocks consist on layers of other rock fragments, or animal or plant fossils.• These compact over millions of years to form rocks.• Clay and limestone are two examples of sedimentary rocks.	<ul style="list-style-type: none">• Extreme heat and pressure from the surrounding earth "bakes" this rock and produces metamorphic rock.• Examples: marble and slate.

PRACTICE

1. Complete the sentences. Then, label the definitions using the correct letters from the picture:

lava	igneous	outside	living	layer	volcanoes
------	---------	---------	--------	-------	-----------



- Fossils are the remains of _____ things that left and imprint in rocks over millions of years. F
- Magma is the hot liquid contained inside _____.
- Lava is what we call magma when it is _____ a volcano.
- Igneous rock forms when molten _____ cools and hardens.
- Sedimentary rocks consist of _____ of other rock fragments, or animal and plant fossils.
- Metamorphic rocks form when _____ and sedimentary rocks are pushed down by other layers of rock from above.

2. Complete the sentences about the three main types of rocks:

quickly	lava	slowly	sedimentary
marble	limestone	millions	granite

- a. Igneous rock forms when molten lava from volcanoes cools down.
- b. If the lava cools _____, small crystals form and the rock has dots of colour.
- c. If the lava cools _____, large crystals form and the rock looks the same colour all over.
- d. Examples of igneous rocks include _____ and basalt.
- e. Sedimentary rock and fossils compact over _____ of years.
- f. Clay and _____ are two examples of sedimentary rocks.
- g. Metamorphic rock forms when igneous and _____ rocks are pushed down by other layers of rock from above.
- h. Examples of metamorphic rocks include _____ and slate.