

FAST 5

How are sedimentary rocks formed?

How are Igneous rocks formed?

How are metamorphic rocks formed?

Sedimentary rocks are rocks that are formed by sediment over time , usually as layers at the bottom of the ocean.

Igneous rocks are rocks formed from lava, as it erupts onto the surface of the earth from volcanoes.

Metamorphic rocks are rock that are changed over time by extreme heat and pressure underneath the Earth's surface.

Can I understand what soil is
and how it is formed?

What is soil ? How is it formed?



Soil is the uppermost layer of the Earth. It is a mixture of different things.

Air

Soil contains gases such as carbon dioxide, oxygen, nitrogen, methane and radon. (25%)

Water

Air and water fill the gaps between particles of soil. (25%)

Mineral

The minerals in soil come from finely broken down rock. (47%)

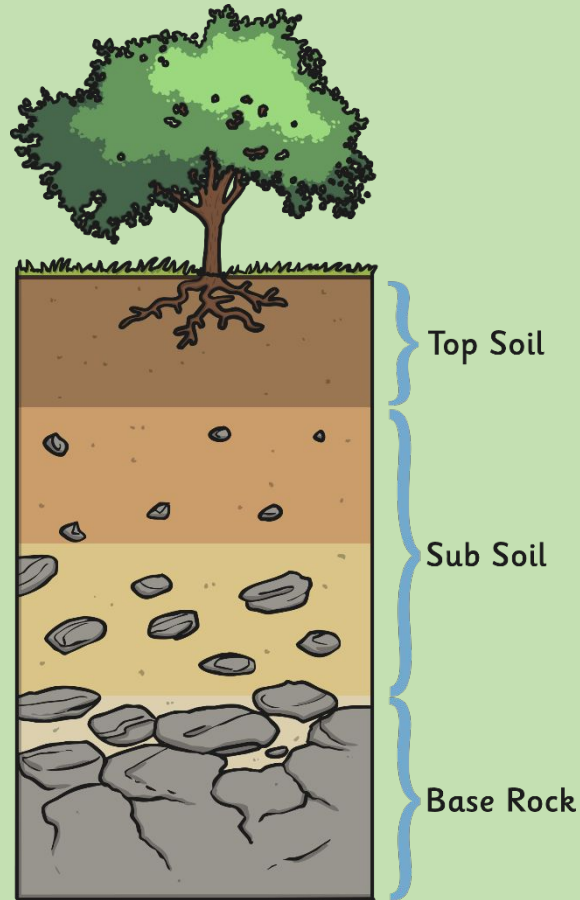
Organic Matter

Organic matter includes both living and decaying animals and plants. (3%)

Watch the clip

- <https://www.bbc.co.uk/bitesize/clips/z7rb4wx>

Look at the diagram to see how soil is layered



Soil is always changing

- Soil does not remain unchanged. There are things being constantly added or lost from the soil all the time.

Some things are added to the soil

- **Rainfall** adds water.
- **Dust** adds minerals.
- **Animal waste** adds organic matter and nutrients.
- **Decaying plants and animals** add organic matter.
- **Humans** add fertiliser. Fertilisers contain minerals and nutrients. Natural fertilisers are made from animal waste and organic matter. Human-made fertilisers are made from chemicals.

Some things are lost from the soil

- **Water** evaporates (turns into gas when hot) into the air.
- **Soil particles** can wash away in storms.
- **Organic matter** can turn into the gas carbon dioxide.
- **Nutrients and Minerals** are taken up by plants and can drain into groundwater.

RED

- Create a poster to show your knowledge of soils.
- You could include a cross section diagram to support your work.
- Think of an interesting title.

Yellow

- Create an information leaflet about soils.
- Use the information in this presentation as well as further internet research.
- Research soils in other climates, how do they differ from the United Kingdom?
- How could you present these ideas ?
- Could you include diagrams?

GREEN

- Create a revision map of all your knowledge over the past 3 lessons.
- As a reminder we have looked at types of rock, properties of rock, fossils and soils.
- Include diagrams and pictures.
- You could print/draw examples.
- Research if rocks and soils are different in other climates.