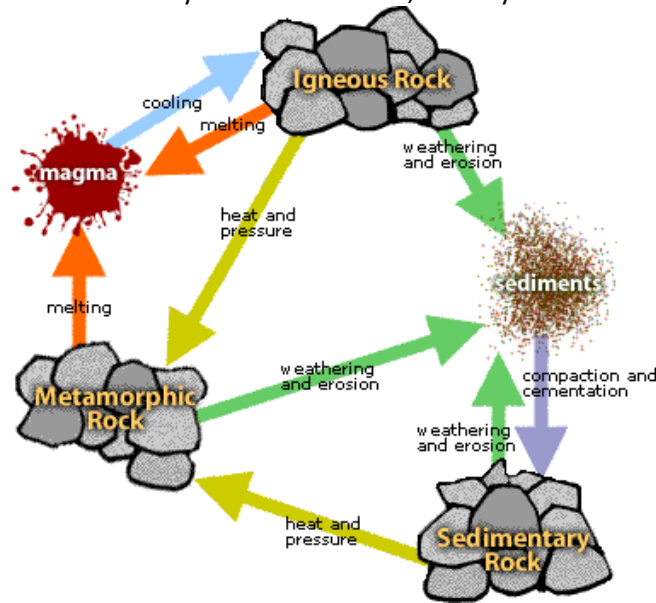


What is the rock cycle?

The rock cycle is a basic concept in geology that describes **transitions** through geologic time among the three main rock types: sedimentary, metamorphic, and igneous.

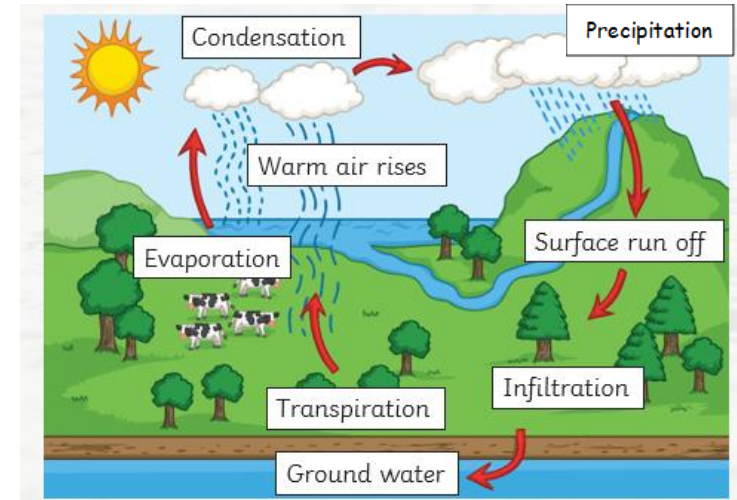
- **Igneous**, which are formed from magma or lava. (for example, basalt and granite) Very hard to break.
- **Sedimentary**, which have layers and fossils. (for example, limestone, sandstone and shale) Formed from sediment grains deposited by water, wind or ice.
- **Metamorphic**, which are formed when one rock changes due to heat and pressure. (for example, slate and marble) Once were igneous or sedimentary rocks.
- The **rock cycle** – the process whereby rocks are created, destroyed or changed.
- All 3 types of rock can be weathered or eroded. When transported & deposited in layers, they are compressed to form **sedimentary rocks**.
- Sedimentary & igneous rocks can be changed by heat/pressure to form **metamorphic rocks**.
- Metamorphic & sedimentary rocks may melt to form magma, and then cool to form **igneous rocks**.
- All these processes continuously occur over huge time scales.



What is the water cycle?

The water cycle, also known as the hydrological cycle, describes the continuous movement of water on, above and below the surface of the Earth.

- **70%** of the Earth is covered in water and **97%** of this is found in the seas and oceans.
- **2%** of the freshwater is found in ice caps and glaciers.
- The same water than existed on earth billions of years ago, still exists today.
- The water cycle illustrates the **continuous** movement of water between the land, the sea and the air.
- Water is naturally **stored** in a variety of places – the ocean, sea, river, lake, snow and ice.
- The sun warms the water giving the particles more energy causing them to **evaporate**.
- As the particles rise higher, they cool down and **condense** into a cloud.
- The condensed particles accumulate making the cloud grow bigger. When the cloud is **saturated** the water falls back into the ground. This is called **precipitation**.
- Some of the water **runs across** the ground and back into the body of water.
- Some of the water **infiltrates** through the soil and rocks into the ground.
- Some of the water in the ground flows through the ground and back into the body of water.
- Some of the water in the ground is **intercepted** by plants and trees. Water vapour leaves the plant of the tree through pore in the leaves. This is called **transpiration**.



1. What are the 3 rock types found in the UK?

2. How are igneous rocks formed?

3. How are sedimentary rocks formed?

4. How are metamorphic rocks formed?

5. Sketch and label the rock cycle below:

6. What is the water cycle?

7. How much of Earth is covered in water?

8. How much of the world's fresh water is found in ice caps and glaciers?

9. Name 3 water stores in the water cycle

10. What is the name of the process that describes the sun heating the oceans and the warm, moist air rising?

11. What is condensation?

12. Why does it rain?

13. Name 3 ways rain flows back to the sea

14. Sketch and label the water cycle below: