**Rock cycles**

The rock cycle is a series of changes in which rocks are formed, broken down and changed into other rocks. The starting point is magma that forms in the mantle. Cracks in the crust allow some of the magma to escape to the surface where it becomes lava and then igneous rock.

**The igneous cycle**
- A volcano forms where lava erupts from the ground.
- Lava quickly cools and turns into black igneous rock.
- Most of the magma cools underground to become igneous rock.
- Movements in the crust push the igneous rocks down into the mantle where they melt and become magma again.
- Sometimes, heat and pressure in the ground cause igneous and sedimentary rock to change into metamorphic rock.

**The sedimentary cycle**
- Rock particles become new sedimentary rocks.
- Sedimentary rocks at the surface are broken up by the action of wind, rain and sun.
- Eventually, the rock particles become new sedimentary rocks.
- Rock particles are carried by rivers into the oceans where they sink to the sea bed. Layers of sediment build up and become sedimentary rock.

**Cycles within cycles**
There are mini cycles within the rock cycle called the igneous and sedimentary rock cycles. Also, igneous and sedimentary rocks can both be changed into metamorphic rocks.

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**Q and A**

**Q.** How long is the rock cycle?

**A.** Millions of years. Sedimentary rocks, for example, are formed from particles which built up over hundreds of millions of years. Igneous rocks are formed from magma which can take thousands or sometimes millions of years to cool. Then some of these rocks are changed into metamorphic rocks.