

Geology Sheet 2 How the rocks were formed







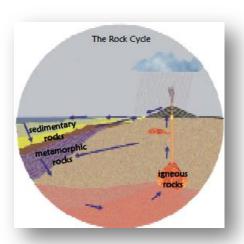


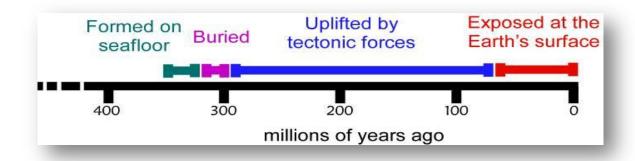




Rocks are formed in three ways:

- 1 By laying down (depositing) sediment particles and the remains of plants and animals (SEDIMENTARY ROCKS, e.g. limestone, mudstone, sandstone)
- 2 By melting existing rocks deep underground (IGNEOUS ROCKS, e.g. granite, basalt)
- 3 By deforming and distorting existing rocks deep underground (METAMORPHIC ROCKS, e.g. slate) All of the rocks in North Clare are SEDIMENTARY ROCKS. These rocks formed in four main stages:





- 1 Sediment particles such as silt, clay, and parts of plants and animals were *deposited* on the sea floor. These sediments were quite soft and flexible.
- 2 The sediments were *buried* as more sediment was deposited on top of older layers of sediment. The sediments were *compacted*: particles of sediments were packed closer together and water was squeezed out. The particles became *cemented* together as crystals grew in between them. At this point, the sediments have now been turned into rock.
- 3. The rocks of North Clare were gradually *uplifted* (pushed upwards) by tectonic forces. As they were pushed upwards, the overlying rocks were eroded away.
- 4. The rocks of North Clare were *exposed* at the Earth's surface, and were eroded and weathered by wind, rain and temperature changes.

