



Rocks and Soils
Geography – Junior Cert
Quick Notes

Rocks and Soils

Igneous rocks are formed when magma cools and hardens at or beneath the earth's surface e.g. granite and basalt. Sedimentary rocks are formed when rock is broken down, transported and deposited as sediments on the beds of lakes and seas e.g. organic (limestone) or inorganic (sandstone). Metamorphic rocks were once igneous or sedimentary rocks which were changed by great heat or pressure e.g. marble and quartzite. Soil is a layer of loose material, providing nutrients and moisture for plants. It comprises of mineral matter. Humus, micro-organisms, air and water. Climate, weathering, rocks, vegetation and humus all have an impact in the formation of soil. Climate determines the type of weathering and type of vegetation in an area. Soils can be divided into three layers which are called profiles – there are three horizons in a soil profile called the A horizon, B horizon and C horizon. Soil leaching is the process by which soil nutrients are washed from the A horizon to the B horizon due to heavy rainfall which may render the soil infertile. The four main soils that exist in Ireland are – Podzols, Brown earth soils, peat soils, gleys. Soil erosion refers to the wearing away and loss of topsoil due to the action of wind, rain and sometimes human activity (overgrazing, overcropping, deforestation). Soil can be conserved by reforestation, terracing and contour ploughing.