
Glossary

Alluvial	Sediments, which may be gravel, sand, silt or mud, which have been transported and deposited by rivers
Ammonoid	A subclass of molluscs with coiled shells belonging to the class Cephalopoda
Anticline	Arch-shaped fold of rocks, closing upwards
Argillaceous rocks	Sedimentary rocks composed of of very fine grain silt or clay-sized particles (<0.0625 mm), usually with a high content of clay minerals
Armour-Stone	Large stone block used in coastal defence and other engineering works
Aureole	Area surrounding an igneous intrusion affected by metamorphic changes
Basalt	A dark-coloured, fine-grained, usually extrusive, igneous rock composed of minerals rich in iron and magnesium and with a relatively low silica content
Batholith	A large body of intrusive igneous rock with no visible floor
Bivalve	Biostrome A layered, sheet-like in situ accumulation of organisms Bituminous Rich in hydrocarbons or bitumen
Blanket Bog	A class of molluscs with paired shell valves
Bouguer Anomaly	An extensive area of peat bog
Brachiopod	A gravity anomaly calculated after corrections for latitude, elevation and terrain.
Braided Rivers	A phylum of solitary marine shelled invertebrates
Breccia	A river consisting of a number of small channels separated by bars
Breccio-conglomerate	Coarse-grained clastic sedimentary rock consisting of angular fragments of pre-existing rocks
Brockram	A rock composed of both angular and rounded fragments of pre-existing rocks. It is intermediate in character between a breccia and a conglomerate
Bryozoa	A term used in NW England for breccias and conglomerates of Permo-Triassic age
Calc-silicate	A phylum of small aquatic colonial animals
Chert	A group of minerals consisting of calcium silicates
Chronostratigraphy	A dense, microcrystalline form of silica which occurs as nodules or beds within parts of the Carboniferous succession of rocks
Cleavage	The standard hierarchical definition of geological time units
Columnar jointing	A property of rocks such as slate, whereby they can be split into thin sheets along aligned fractures or planes produced by the pressures that affected the rocks during severe earth movements
Conglomerate	The crudely polygonal system of vertical joints formed in response to cooling of bodies of intrusive igneous rocks such as sills and dykes
	Coarse-grained clastic sedimentary rock composed of rounded or sub- rounded fragments of pre-existing rocks

Continental shelf	The gently sloping offshore zone, extending usually to about 200 metres depth
Crinoid	Or 'sea lillies' are marine animals composed of calcareous plates, belonging to the phylum Echinodermata
Cross-bedding	Internally inclined layers in a rock related to the original direction of current flow
Cupola	A dome-shaped offshoot rising from the top of a major igneous intrusion
Desiccation cracks	Or shrinkage cracks are polygonal cracks formed in a sediment as it dries out in a terrestrial environment
Displacement	The relative movement on either side of a fault plane
Doline	Or sink hole, is a steep-sided enclosed depression in a limestone region Dolomitic limestone A limestone containing a high concentration of the mineral dolomite Dolomitisation The process by which limestones are wholly or partially transformed into dolomite
Dry valley	A valley produced by running water but which is presently streamless
Dyke	Discordant, sheet-like bodies of intrusive igneous rock in a vertical, or near-vertical orientation
Evaporites	Sedimentary deposit of minerals formed by natural evaporation Fault A fracture in rocks along which some displacement has taken place Feldspar A group of rock-forming minerals consisting of silicates of aluminium, sodium, potassium, calcium and more rarely barium
Felsite	A general term used to denote fine-grained acid or feldspar-rich igneous rocks
Fissile	The tendency of a rock, such as a shale or slate, to split readily into thin sheets along closely spaced bedding or cleavage planes
Gangue	Generally valueless mineral or rock which accompanies an ore
Gastropod	Molluscs belonging to the class Gastropoda, usually with coiled shells
Gouge	Broken rock, often shale or clay, in a mineral vein or between fault planes
Graptolite	A group of extinct colonial marine organisms. Generally placed in the phylum Chordata, but sometimes regarded as Coelenterata. They consist of one or more branches or stipes in which individuals in the colony occur in rows
Greywackes	A sandstone containing a high proportion of silt, clay and rock fragments in addition to quartz grains
Hornfels	A fine-grained rock that has been partly or completely recrystallised by contact metamorphism
Hydrothermal	Processes involving hot ground waters. Includes the formation of mineral veins and the associated alteration of rocks in the formation of flat deposits
Inlier	An outcrop of older rocks surrounded by rocks of younger age
Joints	A fracture, or potential fracture, in a rock adjacent to which there has been no displacement

Lamprophyre	A group of intrusive igneous rocks characterised by abnormally high contents of silicate minerals such as biotite, hornblende and augite, with generally small amounts of feldspar
Lapilli-tuff	A compact rock composed of small pieces of lava or ash rounded during eruption
Lithified	Literally 'changed to stone'. Applied to loose sediment which has been consolidated to a solid rock
Lithology	The character of a rock expressed in terms of its mineral composition, structure, grain size and arrangement of its constituents
Magma	Molten rock
Magnetic anomaly	The value of the local magnetic field remaining after the subtraction of the dipole portion of the earth's field
Marl	An old term loosely applied to a variety of sediments which typically consist of intimate mixtures of clay and calcium carbonate
Metamorphism	Change in the mineralogy and structure of a rock as a result of the effects of heat and/or pressure
Millet seed grains	Smooth and conspicuously rounded sand grains which resemble millet seeds. Commonly with frosted surfaces resulting from wind action in desert environments.
Monocline	A one-limbed fold on either side of which the strata are horizontal or dip at only low angles
Mountain building	The complex series of geological processes which create mountains
Nunatak	An isolated mountain peak projecting from an ice sheet
Oolitic limestone	A limestone consisting predominantly of sub-spherical, sand-sized, concentric grains, or ooids, composed of calcite or dolomite
Ostracod	Small arthropods belonging to the subclass Ostracoda, having a twin shell
Outlier	A remnant of a younger rock surrounded by older strata Palaeomagnetic The magnetic characteristics of a rock formed in the geological past Pegmatite An igneous rock of especially coarse grain size
Phenocryst	Large crystals, usually of near perfect shape, embedded in a fine-grained matrix in igneous rocks
Phreatic	Volcanic eruptions generated by the interaction between hot magma and surface or ground water
Phyllites	A cleaved metamorphic rock characterised by a silky lustre due to minute flakes of white mica which are too small to be seen by the naked eye
Pisolitic limestone	A limestone consisting predominantly of sub-spherical, concentric grains larger than 2mm in diameter, or pisoliths, composed of calcite or dolomite
Porphyritic	The term applied to igneous rocks which contain isolated crystals, or phenocrysts, larger than those forming the main body of the rock
Pseudomorph	A secondary mineral, or a random aggregate of secondary minerals, which have replaced a pre-existing mineral, but have retained its shape

Radiometric dating	The method of determining the geological age by measuring the relative abundance of parent and daughter isotopes in rocks
Rendzina	A brown earth soil of humid or semi-arid grassland that has formed over calcareous parent material.
Ripple marks	Small scale ridges and troughs formed by the flow of water or wind over unconsolidated sandy or silty sediment. The fossilised equivalent of ripples found today on beaches and river sands
Rottenstone	Any highly decomposed but still coherent rock
Sedimentary rocks	Rocks formed by the accumulation of fragments from the wasting of previous rocks or organic materials, deposited as layers of sediment
Sill	A tabular igneous intrusion with concordant contacts with the surrounding wall rocks
Sink hole See doline	
Slate	A fine-grained metamorphic rock derived mainly from mudstone or shale, and which splits, or cleaves, readily into very thin sheets as result of the re-alignment of its constituent minerals during metamorphism
Statigraphy	The definition and description of the stratified rocks of the Earth's crust Streak The name given to the colour of the powder of a mineral or rock Stromatolite A laminated, mound-like structure, built up over long periods of time by successive layers or mats of algae or bacteria, which have trapped sedimentary material
Supergene	Alteration formed near the surface
Syncline	A concave-upwards fold with the youngest rocks in the centre
Syngenetic ore	A deposit formed simultaneously with the host rock and by similar or mineral deposit processes
Tailings	Fine-grained waste from mineral processing operations
Throw	The amount of displacement on a fault
Trilobite	Extinct marine arthropods characterised by having a segmented oval body divided into three segments
Tufa	A porous or cellular deposit of calcium carbonate deposited from lime- rich springs
Tuff	A rock formed of compacted volcanic fragments
Turbidity current	A dense sub-marine flow of mixed water and sediment, capable of very rapid movement
Unconformity	A substantial break in the succession of stratified sedimentary rocks following a period when no deposition was taking place
Volcaniclastic	A rock containing volcanic fragments in varying proportions
Xenolith	A foreign inclusion in an igneous rock