

Terminology

Foundational Terminology	
Terminology	Meaning
Aquifer	An underground layer of permeable rock or sediment that can hold and transmit groundwater.
Permeability	The ability of a rock or sediment to transmit fluids (like water).
Porosity	The percentage of the total volume of a rock or sediment that is occupied by empty spaces (pores).
Water Table	The upper surface of the zone of saturation, where the pore spaces are completely filled with water.
Seismology	The scientific study of earthquakes and the movement of seismic waves through the Earth.
Crust	The outermost solid layer of the Earth, which is divided into continental and oceanic sections.
Mantle	The thick layer of solid rock between the Earth's crust and the core, mostly composed of silicate minerals.
Core	The Earth's innermost part, consisting of a solid inner core and a liquid outer core, primarily made of iron and nickel.
Plate Tectonics	The theory explaining the structure of the Earth's lithosphere as being composed of large rigid plates that move slowly over the underlying mantle.
 Structural & Tectonic Terminology	
Terminology	Meaning
Fault	A fracture or break in the Earth's crust where blocks of rock have moved relative to one another.
Fold	A bend or curve in rock layers resulting from compressional forces within the Earth's crust.

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Seismology	The scientific study of earthquakes and the movement of seismic waves through the Earth.
Strike and dip	Measurements that describe the orientation (attitude) of a geological feature (like a rock layer or a fault plane) in three-dimensional space.
Unconformity	A buried erosional or non-depositional surface separating two rock masses or strata of different ages, indicating a gap in the geological record.
Subduction Zone	A convergent plate boundary where one tectonic plate is forced beneath another, sinking into the mantle.
Orogeny	A process in which a section of the Earth's crust is folded and deformed to form a mountain range.
Intrusion	A body of igneous rock that solidified beneath the Earth's surface, cutting across pre-existing rock layers.

Rock & Sediment Terminology

Terminology	Meaning
Igneous Rock	Rock formed through the cooling and solidification of magma or lava.
Sedimentary Rock	Rock formed by the accumulation and cementation of mineral or organic particles (sediments) on the Earth's surface.
Metamorphic Rock	Rock that has been changed by heat, pressure, or chemical processes, typically deep within the Earth's crust.
Magma	Molten rock material found beneath the Earth's surface.
Lava	Molten rock material that has erupted onto the Earth's surface.
Facies	The sum of all features (lithology, fossil content, structures) of a rock that indicate the conditions under which it was formed (e.g., <i>deep-marine facies</i>).
Lithification	The process by which unconsolidated sediments are compacted and cemented to form solid rock.

Hydrology & Environmental Terminology

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Water Table	The upper surface of the zone of saturation, where the pore spaces are completely filled with water.
Seismology	The scientific study of earthquakes and the movement of seismic waves through the Earth.

English Terminology	Arabic Translation (العربية)
Crust	القشرة (الأرضية)
Mantle	الوشاح
Core	النواة
Plate Tectonics	تكتونية الصفائح
Mineral	معدن
Rock	صخر
Outcrop	مكشّف (صخري)
Weathering	التجوية
Erosion	التعرية
Fault	صدع
Fold	طيّة
Strike and Dip	المضرب والميل
Unconformity	عدم توافق
Subduction Zone	منطقة الاندساس
Orogeny	بناء الجبال / تكون السلاسل الجبلية
Intrusion	اندساس / جسم متداخل
Igneous Rock	صخر ناري

English Terminology	Arabic Translation (العربية)
Sedimentary Rock	صخر رسوبي
Metamorphic Rock	صخر متحول
Magma	صهارة / ماجما
Lava	حمم / لافا
Facies	سحنة
Lithification	تصخر
Aquifer	خزان جوفي / طبقة حاملة للمياه
Permeability	النفاذية
Porosity	المسامية
Water Table	منسوب المياه الجوفية
Seismology	علم الزلازل