

Glossary of Basic Geological Terms

English term	Czech term	Explanation
ablation	ablace	The process of decreasing of ice volume of a glacier. Synonym wastage.
abrasion	abraze	The grinding away of a rock by friction and impact during transportation.
absolute age	absolutní stáří	Age given in years or some other unit of time (mostly in million of years).
abyssal fan	abysální dejekční kužel	Great fan-shaped deposit of sediment on the deep-sea floor at the base of many submarine canyons.
abyssal plain	abysální rovina	Very flat sediment-covered region of the deep-sea floor, usually at the base of the continental rise.
accessory minerals	akcesorické minerály	Rock-forming minerals which occur in a rock in a very small amount (several percents of mineral content) and which have no effect to classification of a rock.
acid rocks	kyselé vyvřelé horniny	Igneous rocks with high amount of silica. They are macroscopically recognizable by high percentage of quartz, K-feldspars and/or acidic plagioclases.
advancing glacier	postupující ledovec (rostoucí)	Glacier with a positive budget, so that accumulation results in the lower edges being pushed outward and downward.
aftershock		Small earthquake that follows a main shock.
albite	albit	Kind of plagioclase (acidic) within the feldspar group with formula NaAlSi ₃ O ₈ . Its colour is light grey to grey. Other properties see feldspars.
aleurites	aleurity	Clastic sediments or sedimentary rocks with size of particles between 0,002-0,063 mm.
allothigenous minerals		Minerals, which were transported from other place into a newly formed sediment. These minerals are highly resistant to weathering processes.
alotriomorphic minerals	alotriomórně omezené minerály	Minerals of igneous rocks which crystallize as latest in a process of magma crystallization. It results in a shape of these minerals, which are forced to crystallize in a space created by formerly crystallized surrounding minerals.
alluvial deposits	aluvialní sedimenty	General term for clastic sedimentary rocks with no cohesion, which have been transported and deposited by a stream.
alluvial fan	aluvialní kužel (dejekční)	Large fan-shaped pile of sediment that usually forms where stream's velocity decreases as it emerges from a narrow canyon onto a flat plain at the foot of a mountain range.
alpine glaciation	alpínské zalednění	Glaciation of a mountainous area.
amorphous substance	amorfní látka	Substance where atoms are not ordered in crystal lattice.
amphibole	amfibol	Ferromagnesian mafic mineral which belongs to silicates. Properties: black in colour, cleaved, cleavage planes are stepped rather than smooth, splintery appearance, columnar, hardness is from 5 to 6, vitreous or silk luster.
amphibolite	amfibolit	Mostly black, amphibole (hornblende), plagioclase schist with characteristic plane parallel structure (compare with hornblende).
amygdaloidal structure	mandlovcovitá textura	Type of structure of igneous rocks, which is typical for its "almond shaped" pores secondary filled with material. This structure is formed after porous structure.
andesite	andezit	Fine-grained igneous rock of intermediate composition. Up to half of the rock is plagioclase feldspar with the rest being ferromagnesian minerals. It is often porphyritic.
angular	ostrohranný	Sharp-edged; lacking rounded edges or corners.
anhydrite	anhydrit	Anhydrite is a relatively common sedimentary mineral that forms massive rock layers. Anhydrite does not form directly, but is the result of the dewatering of the rock forming mineral Gypsum (CaSO ₄ -2H ₂ O). Color is ordinarily white, gray or colorless but also blue to violet. Luster is vitreous. Crystal habits include the tabular, rectangular box often elongated in one direction forming a prismatic crystal. Most commonly massive and granular. Cleavage is in three directions forming rectangles, but perfect in one, very good in another and only marginally good in the third direction. Hardness is 3.5.
anorthite	anortit	Mineral which belongs to plagioclase feldspar group with formula CaAl ₂ Si ₂ O ₈ . Grey to dark grey in colour, other properties see feldspars.
anticline	antiklinála	An arched fold in which the rock layers usually dip away from the axis of the fold.

apatite	apatit	Hexagonal mineral with formula $\text{Ca}_5(\text{PO}_4, \text{CO}_3)_3(\text{F}, \text{OH}, \text{Cl})$. Green, green-brown, yellow in colour. Hardness is 5. Columnar shape. Poorly cleavaged.
aphanitic	afanitický	Pertaining to a texture of rocks in which the crystalline constituents are too small to be distinguished with the unaided eye. It includes both microcrystalline and cryptocrystalline textures.
aplite	aplit	A dike rock consisting almost entirely of light-coloured mineral constituents and having a characteristic fine-grained granitic texture.
aquifer	zvoděň	A body of saturated rock or sediment through which water can move readily.
arcose	arkóza	A sandstone in which more than 25% of the grains are feldspar.
artesian well	artéská studna	A well in which water rises above the aquifer.
asthenosphere	astenosféra	A region of the earth's outer shell beneath the lithosphere. The asthenosphere is of indeterminate thickness and behaves plastically.
authigenous minerals	autigenní minerály	Minerals which occur on the place of their origin.
bar		A ridge of sediment, usually sand or gravel, that has been deposited in the middle or along the banks of a stream by a decrease in stream velocity.
basal sliding		Movement in which the entire glacier slides along as a single body on its base over the underlying rock.
basalt	čedič	A fine-grained, mafic, igneous rock composed predominantly of ferromagnesian minerals and with lesser amount of calcium-rich plagioclase feldspar. Mostly black.
base level	úroveň hloubky eroze	A theoretical downward limit for stream erosion of the earth's surface.
basic rocks	bazické vyvřelé horniny	Igneous rocks with relatively high percentage of mafic minerals and low percentage of silica (amount of SiO_2 is between 44 and 52 %).
batholith	batolit	A large discordant pluton with an outcropping area greater than 100 square kilometers.
bedding	zvrstvení	An arrangement of layers or beds of rock.
bedding plane	vrstevní plocha	A nearly flat surface separating two beds of sedimentary rock.
bedrock	skalní podklad	Solid rock that underlies soil.
bentonite	bentonit	Rock composed of clay minerals, mainly montmorillonite, formed mostly by decomposition in water or weathering on the Earth surface.
biochemical sedimentary rocks	biochemické sedimenty	General term for organic and chemical sedimentary rocks.
biotite	biotit	Iron/magnesium bearing mica. Black to dark brown in colour, other properties see mica.
blowout		A depression on the land surface caused by wind erosion.
body waves		Seismic waves that travel through the earth's interior.
bonding	vazby	Attachment of an atom to one or more adjacent atoms.
borelog	záznam vrtného profilu	Graphical report of a well.
boulder	balvan	A sediment particle with a diameter greater than 256 mm.
boulder loam	souvková hlína	Glacial sediment formed as a result of glacier accumulation, either in front of a glacier or on its base. It is mostly fine-grained material with larger fragments.
breccia	brekcie	A fragmental rock whose components are angular and therefore, as distinguished from conglomerates, are not waterworn.
butte	svědecká hora	A narrow pinnacle of resistant rock with a flat top and very steep sides.
calcite	kalcit	Mineral with the formula CaCO_3 . Mostly white, yellow or grey in colour, cleavaged, glassy luster on cleavage planes, hardness is 3, streak is always white. Reacts strongly with dilute hydrochloric acid.
Cambrian	kambrium	The oldest period in paleozoic, which took place 570-500 million of years ago.
canyon	kaňon	A long, deep valley with steep slopes, which was formed as a result of water stream erosion.
carbonates	karbonáty	A group of minerals, which have in their formulas CO_3 anions. Properties of individual members of this group are very similar to calcite.
Carboniferous	karbon	A period in paleozoic (285-350 million of years ago), in which great amount of coal was formed.
cave	jeskyně	Naturally formed underground chamber.
caving sediments	nezpevněné nesoudržné sedimenty	Sedimentary rocks without cohesion.
cement	pojivo	The solid material that precipitates in the pore space of sediments,

		binding the grains together into a hard rock.
cementation	zpevňování	The process of chemical precipitation of material in the spaces between sediment grains, binding the grains together into a hard rock.
Cenozoic	kenozoikum	Geological period from Tertiary (65 million of years ago) to present.
cirque	kar	A steep-sided, amphitheater-like hollow carved into a mountain at the head of a glacial valley.
clastic sedimentary rocks	klastické sedimentární horniny	A sedimentary rocks composed of fragments of preexisting rocks, formed by weathering, transportation and deposition.
clastic textures	klastické struktury	An arrangement of rock fragments of different size of particles. This term can be used only for sedimentary rocks.
clay	jíl	Sediment composed of particles with diameter less than 0,002 mm.
clay minerals	jílové minerály	A hydrous-aluminium silicates that occurs as a platy grains of microscopic size with a sheet silicate structure (e.g. kaolinite, montmorillonite, illite, glauconite).
clay shale	jílová břidlice	Pelitic sedimentary rock, mostly laminated.
claystone	jílovec	Partly lithificated pelitic sediment.
cleavage	štěpnost	The ability of a mineral to break along preferred planes. It relates to inner structure of a mineral.
cleavage plane	štěpná plocha	Plane along which mineral with cleavage breaks.
cliff	útes	Steep, high rock on marine coast, which arose by water erosion.
coal	uhlí	A sedimentary rock formed by the consolidation of plant material. It is rich in carbon, usually black, and burns readily.
coarse-grained rock	hrubě zrnitá hornina	Rock in which most of the grains are from 3 to 10 mm in size.
cobble	valoun	A sediment particle with a diameter of 64 to 256 mm.
coefficient of flatness	koeficient plochosti	Ratio between the longest and the shortest axis of rock fragment.
columnar shape	sloupcovitý tvar	1. Shape formed by jointing of some volcanic rocks - parallel, usually vertical columns, mostly six-sided. 2. Habitus of some minerals.
compact structure	kompaktní textura	Type of structure of rocks, where there are no pores in a rock.
compaction	kompakce	A loss in overall volume and pore space of a rock as a particles are packed closer together by the weight of overlying material.
concordant	konkordantní	Parallel to layering or earlier developed planar structures.
cone of depression	depresní kužel	A depression of the water table formed around a well when water is pumped out; it is shaped like an inverted cone.
confined aquifer	napjatá zvoděň	An aquifer completely filled with pressurized water and separated from the land surface by a relatively impermeable confining bed, such as shale.
confining pressure	všesměrný tlak	Pressure applied equally on all surfaces of a body; also called geostatic or lithostatic pressure.
conglomerate	slepeneč	A coarse-grained sedimentary rock (grains coarser than 2 mm) formed by the cementation of rounded gravel.
conchoidal fracture	lasturnatý lom	Type of fracture similar to conch surface.
contact metamorphism	kontaktní metamorfóza	Metamorphism under conditions in which high temperature is the dominant factor.
contact schist	kontaktní břidlice	Metamorphic rock formed usually on a contact between magma and sedimentary pelitic rock.
contact-metamorphic rocks	kontaktně metamorfované horniny	Metamorphic rocks formed as a result of contact between magma and some rock. This type of metamorphism is mostly thermal.
continental crust	kontinentální zemská kůra	A part of the Earth's crust which forms continents. It's thickness is from 25 km to 80 km, 38 km in average. The thickness of continental crust and its structure varies according to geological units. Young alpine mountain belts have continental crust up to 80 km thick (Himalayas).
continental drift	kontinentální drift	A concept suggesting that continents move over the earth's surface.
continental glaciation	kontinentální zalednění	The covering of a large region of a continent by a sheet of glacial ice.
continental shelf	kontinentální šelf	A submarine platform at the edge of a continent, inclined very gently seaward generally at an angle of less than 1°. It is bordered by continental slope.
continental slope	kontinentální svah	A relatively steep slope extending from a depth of 100 to 200 meters at the edge of the continental shelf down to oceanic depths.
convection	konvekční proudění	A very slow circulation of a substance driven by differences in temperature and density within that substance.
converging boundary	konvergentní rozhraní	Boundary between two lithospheric plates that are moving toward each other.

coquina	organodetritický vápeneč	A limestone consisting of large shells.
coral reefs	korálové útesy	Organogenous rocks on marine coast composed of coral skeletons.
core	zemské jádro	The central zone of the earth. It's radius is 3478 km.
correlation	korelace	Determining age relationships between rock units or geologic events in separate areas.
craton	kraton	Portion of a continent that has been structurally stable for a prolonged period of time.
creep	plouživý pohyb	Very slow, continuous downslope movement of soil and rock.
Cretaceous	křída	The last period of Mesozoic before Tertiary (136-65 millions of year ago).
crevasses	ledovcová trhlina	Open fissures in a glacier.
cross bedding	křížové zvrstvení	An arrangement of relatively thin layers of rock inclined at an angle to the more nearly horizontal bedding planes of the larger rock unit.
crust	zemská kůra	The outer layer of rock, forming a thin skin over the earth's surface.
crust fault	hlubinný zlom	Very deep fault (from tenths to hundreds of kilometers) in the Earth's crust, which separates two lithospheric plates.
crustal rebound		The rise of the earth's crust after the removal of glacial ice.
crystalline substance	krystalická hmota	Substance with specific inner structure, which is called crystal lattice.
crystalline texture	krystalická struktura	An arrangement of interlocking crystals.
Darcy's law	Darcyho zákon	Formula, in which relation between hydraulic gradient, hydraulic conductivity and soak velocity is defined.
debris	suť	Any unconsolidated material at the earth's surface.
debris avalanche	bahnotok	A very rapidly moving, turbulent mass of debris, air and water. This is the fastest variety of debris flow.
deflation	deflace	The removal of clay, silt and sand particles from the land surface by wind.
delta	delta	A body of sediment deposited at the mouth of a river when the river velocity decreases as it flows into a standing body of water.
denudation	denudace	General term for lowering of the earth surface by processes such as erosion etc.
deposition	usazování	The settling or coming to rest of transported material.
depth of focus	hypocentrum zemětřesení	Distance between the focus and the epicenter of an earthquake (perpendicular distance between the focus and the Earth surface).
desert	poušť	A region with low precipitation (usually defined as less than 25 cm per year)
Devonian	devon	Period of Paleozoic (between 395-345 million of years ago).
diabase	diabas	A rock of basaltic composition, consisting essentially of labradorite and pyroxene, and characterized by ophitic texture (discrete crystals or grains of pyroxene fill the interstices between lath-shaped feldspar crystals).
diamond	diamant	Mineral which is composed of carbon, the hardest mineral on the Earth (hardness=10). It was formed in conditions of high pressure and temperature.
diatomite	diatomit	Organogenous sediment composed mostly of very small silica shells (shells of organisms called Diatomacea)
dike	pravá žíla	A tabular, discordant intrusive structure.
diorite	diorit	Plutonic igneous rock of intermediate composition. Up to half of the rock is plagioclase feldspar and the rest is ferromagnesian minerals.
dip	sklon	The angle that a structural surface, e.g. a bedding or fault plane, makes with a horizontal. See dip angle, direction of dip.
dip angle	úhel sklonu	A vertical angle measured downward from the horizontal plane to an inclined plane.
dip-slip fault		A fault in which movement is parallel to the dip of the fault surface.
direction of dip	směr sklonu	The compass direction in which the angle of dip is measured.
disappearing stream	ponor	Surface stream, which apparently disappears under ground and appears again on a surface at different place. This type of stream is common in area with limestones (karst).
discordant	diskordantní	Not parallel to any layering or parallel planes.
diverging boundary	divergentní rozhraní	Boundary separating two lithospheric plates moving away from each other.
dolomite	dolomit	1. Type of mineral with formula (Ca,Mg)(CO ₃) ₂ . It's properties are very similar to calcite, but it reacts slowly with dilute hydrochloric acid

		unless powdered. 2. A sedimentary rock composed mostly of the mineral dolomite.
Dolostone	dolomit	Synonym for dolomite.
downcutting	hloubková eroze	A valley-deepening process caused by erosion of a stream bed.
drainage	odvodnění	Removal of water from some area by system of channels, ditches or drainage wells.
drawdown		The lowering of the water table near a pumped well.
drilling	vrtání	Making of a vertical round shaped hole under the surface for different purpose - for example obtain a underground water or to obtain some information about geologic conditions.
drumlin	drumlin	A long, streamlined hill made of till.
dry stream bed	vyschlé koryto řeky	Stream bed, which is temporary without water.
dull luster	matný lesk	
earthflow	sesuv	Slow-to- rapid mass wasting in which debris moves downslope as a very viscous fluid (See landslide).
earthquake	zemětřesení	A trembling or shaking of the ground caused by the sudden release of energy stored in the rocks beneath the surface.
eclogite	eklogit	Basic metamorphic rock consisting mainly from minerals garnet and pyroxene (omphacite). Mostly dark grey to black in colour with massive structure.
effusive rocks	výlevné horniny	Igneous rocks which have solidified on the earth surface.
end moraine	čelní moréna	A ridge of till piled up along the front edge of a glacier.
environment of deposition	sedimentační prostředí	The location in which deposition occurs, usually marked by characteristic physical, chemical or biological conditions.
epicenter	epicentrum zemětřesení	The point on the earth's surface directly above the focus of an earthquake.
epidote	epidot	It occurs sometimes in form of finely crystalline masses in joints of a rock, rarely forms elongate crystals. Color is "pistachio" green to yellowish or brownish green, also brown to black. Hardness is more than 5, cleaved.
erlan	erlan	Contact metamorphic rock consisting mainly of calcium silicates.
erosion	eroze	The physical removal of rock by an agent such as running water, glacial ice, or wind.
erratic	eratický balvan	An ice-transported boulder that does not derive from bedrock near its present site.
esker	esker	A long, sinuous ridge of sediment deposited by glacial meltwater.
essential minerals	hlavní (podstatné) hominotvorné minerály	Rock forming minerals, which form essential part of a rock. They are important for classification of a rock.
evaporites	evapority	Sedimentary rocks that form from crystals precipitating during evaporation of water.
even-grained texture	stejně zrnitá struktura	Type of texture of igneous rocks, where minerals in a rock are not very different in size (opposite term to porphyritic structure).
exfoliation	exfoliace	The stripping of concentric rock scales to slabs from the outer surface of a rock mass.
extrusive rocks	výlevné vyvřelé horniny	Any igneous rocks that form at the earth's surface, whether it solidifies directly from a lava flow or is pyroclastic.
fall	skalní řícení	The situation in mass wasting that occurs when material free-falls or bounces down a cliff. See rockfall.
fault	zlom	A fracture in bedrock along which movement has taken place.
feldspars	živce	Group of most common minerals of the earth's crust. All feldspars contain silicon, aluminium, and oxygen and may contain potassium, calcium, and sodium. Pink, white to dark grey, rarely green in colour. Hardness is around 6. Perfect cleavage, vitreous luster when fresh, dull when weathered. Attention: According to luster on cleavage planes are feldspars very often confused with muscovite.
felsic rocks	světlé vyvřelé horniny	Silica rich igneous rocks with silica content more than 65%.
fine-grained rocks	jemnozrné horniny	A rocks (except clastic sediments) in which most of the mineral grains are between 0,33-0,01 mm in size.
fiord	fjord	A coastal inlet that is a glacially carved valley, the base of which is submerged.
firn	firn	A compacted mass of granular snow, transitional between snow and glacial ice.
fissured clays	potřhané jíly	Clays with a lot of small, irregular fissures.

flexure	ohyb	Bending of beds (without rupture) as a result of long lasting and slow tectonic pressure.
flint	pazourek	A dense, fine-grained form of silica which is very tough and breaks with a conchoidal fracture and cutting edges. It occurs in cretaceous cliffs.
flood erosion		Erosion caused by the high velocity and large volume of water in a flood.
flood plain	inundační území	A broad strip of land built up by sedimentation on either side of a stream channel.
flow	tečení	A type of movement that implies that a descending mass is moving downslope as a viscous fluid.
fluidal structure	proudovitá textura	Structure of igneous rocks, where rock particles have preferred direction in orientation.
fluorite	fluorit	Mineral with formula CaF_2 . It is a basic raw material for fluor and fourth member of Moh's scale. Purple, green, yellow in colour. Perfect cleavage, vitreous luster.
focus	ohnisko zemětřesení (hypocentrum)	The point within the earth from which seismic waves originate in an earthquake.
foids	zástupci živců	Group of minerals formed instead of feldspars within the process of magma crystallization, when amount of SiO_2 in magma is reduced. Main members of this group are: leucite, nepheline, analcime, sodalite, nosean, hauyne.
fold	vrása	Bend in layered bedrock of sinusoidal shape.
foliation	foliace	Parallel alignment of structural features of a rock.
foliation plane	foliační plocha	Plane with parallel alignment to structural features of a rock.
fossiliferous limestone	organogenní vápenc	Limestone composed of fossil shells or skeletons.
fossils	fosílie	Traces or fragments of skeletons of plants or animals preserved in rock.
fracture	zlom	The way a substance breaks where not controlled by cleavage.
fracture plane	lomná plocha	Curved plane formed by fracture, often conchoidal.
fragments of rocks	úlomky hornin	Pieces of rock decomposed by mechanical or chemical weathering.
fresh rock	neovětrálá hornina	Rock not affected by weathering.
frost action	účinek mrazu	Mechanical weathering of rock by expansion of freezing water.
frost heaving		The lifting of rock or soil by the expansion of freezing water.
frost wedging		A type of frost action in which the expansion of freezing water pries a rock apart.
gabbro	gabro	A mafic, coarse-grained igneous rock composed predominantly of ferromagnesian minerals and with lesser amounts of calcium-rich plagioclase feldspar.
gaining stream		A stream that receives water from the zone of saturation.
garnet	granát	Reddish brown, yellowish tan in colour, vitreous to pitch luster. Hardness is 6.5 to 7.5. Without cleavage. Mineral which often occurs in metamorphic rocks, sometimes in igneous rocks.
geologic cross-section	geologický řez	A representation of a portion of the earth in a vertical plane.
geologic time scale	geologická časová škála	Geologic term, which means mirroring of Earth history expressed in a form of geologic periods.
geology	geologie	Scientific branch studying origin and development of the Earth and other planets.
geophysics	geofyzika	The application of physical laws and principles to a study of the earth.
geothermal energy	geotermální energie	Thermal energy produced by the Earth. Some sources of this energy can be harnessed and used by a man.
geothermal gradient	geotermální gradient	Rate of temperature increase associated with increasing depth beneath the surface of the earth (normally about $25^\circ\text{C}/\text{km}$).
geyser	gejzír	A type of hot spring that periodically erupts hot water and steam.
geyserite	gejzírít	A deposit of silica that forms around many geysers and hot springs.
glacial age	doba ledová	Geologic period in Quaternary, when glaciers were advancing.
glacial budget		Sum of advancing and receding of glacier per one year (positive and negative).
glaciation	zalednění	General term for covering of the Earth surface by a glacier.
glacier	ledovec	A large, long-lasting mass of ice, formed on land by the compaction and recrystallization of snow, which moves because of its own weight.
glacier recession	ústup ledovce	Receding of a glacier.
glacier tonque	splaz ledovce	"Freezing stream shaped" accumulation of ice on edge of a glacier.

glassy luster	skelný lesk	A luster that gives a substance a glazed, porcelainlike appearance. See vitreous luster.
glauconite	glaukonit	Dark green coloured clay mineral occurring in some sands and sandstones. Properties see clay minerals.
gneiss	rula	A metamorphic rock composed prevailingly of quartz, feldspars and micas arranged in plane parallel structure.
graben	příkopová propadlina	A down-dropped block bounded by normal faults.
graded bed		A single bed with coarse grains at the bottom of the bed and progressively finer grains toward the top of the bed.
graded bedding	gradační zvrstvení	An arrangement of layers of clastic sediments and sedimentary rocks. Each layer has different size of particles and granularity of layers tends toward from coarse to fine.
granite	granit	A felsic, coarse-grained, intrusive igneous rock composed mostly of quartz, feldspars and often containing micas. It belongs to group of granitoids.
granite porphyr	žulový porfyr	Dike rock with composition similar to granite. It differs only by a texture and structure.
granitoids	granitoidy	A group of "granite like rocks", which differs from each other only by type of feldspar.
granoblastic texture	granoblastická struktura	Texture of metamorphic rocks, which is characterized by "grain shaped" minerals, e.g. marble.
granodiorite	granodiorit	Igneous plutonic rock belonging to group of granitoids. It has composition similar to granite except the ratio between types of feldspar (plagioclases>K-feldspars).
granulite	granulit	High-grade metamorphic rock, light-grey coloured. It is composed of quartz and feldspars, mostly with presence of small garnet grains.
graphic texture	písmenková struktura	Special texture created by intergrowth of feldspars and quartz, which looks like hieroglyphic letters.
graphite	grafit	Mineral formed of carbon. Gray to black in colour. Hardness is 1. It may have dull luster, greasy feel, soils paper and fingers.
gravel	štěrk	Sediment composed of rounded particles coarser than 2 mm in diameter.
greywacke	droba	A sandstone with more than 20% of unstable particles and feldspars within psammitic fraction and more than 15% of finegrained matrix.
ground moraine	spodní (bazální) moréna	A blanket of till deposited under a glacier or released as glacier ice melted.
groundmass	základní hmota	The material between the phenocrysts in porphyritic igneous rock. It includes the basis or base as well as the smaller crystals of the rock. Essentially synonymous with matrix.
groundwater	podzemní voda	The water that lies beneath the ground surface, filling the cracks, crevices, and pore space of rocks.
gypsum	sádrovec	Mineral with formula CaSO ₄ . It is formed by evaporation. Clear, white, light grey in colour. Hardness is 2. Vitreous to pearly luster, brittle sheets. Perfect cleavage.
habit	habitus	Term describing shape of a crystal (e.g. tabular, columnar).
halite	sůl kamenná	Mineral with formula NaCl. It is formed by evaporation. Clear to grey in colour. Hardness is 2.5. Perfect cleavage. Salty taste.
hanging valley	visuté údolí	A smaller valley that terminates abruptly high above a main valley.
headward erosion	zpětná eroze	The lengthening of a valley in an uphill direction above its original source by gullying, mass wasting, and sheet erosion.
hematite	hematit	(1) Mineral with formula Fe ₂ O ₃ . Mostly fine grained, reddish brown in colour. Hardness is 1.5 to 5.5, dull luster. It occurs in form of earthy masses. It is product of chemical weathering (oxidation). (2) Rarely with formula Fe ₃ O ₄ , steel grey to dull red in colour. Hardness is 6. May be micaceous (tiny flakes) or massive.
hemicrystalline rocks	hemikrystalické horniny	Volcanic rocks, which have cooled very quickly. Part of rock mass is composed of volcanic glass.
hinge line	osa vrásy	Line about which a fold appears to be hinged. Line of maximum curvature of a folded surface.
hinge plane	rovina vrásy	See axial plane.
holocrystalline rocks	holokrystalické horniny	Igneous rocks with fully crystalized rock mass.
horizontal bedding	horizontální zvrstvení	Type of bedding, where layers are oriented horizontally.
hornblende	obecný amfibol	Common amphibole frequently found in igneous and metamorphic rocks. Properties see amphibole.
hornfels	kontaktní rohovec	A fine-grained, unfoliated metamorphic rock.

horst	hrást'	An up-raised block bounded by normal faults.
hyaline texture	hyalinní struktura	Texture of volcanic rocks or their groundmass, which is formed by amorphous substance.
hydraulic conductivity	koeficient filtrace	Number characterizing permeability of rocks.
hydraulic gradient	hydraulický gradient	The ratio between vertical difference of heights of two water tables and their horizontal distance.
hydrologic cycle	hydrologický cyklus	The movement of water and water vapor to the atmosphere, to the land, and to the atmosphere again.
hypidiomorphic minerals	hypidiomorfně omezené minerály	Partly confined mineral grains formed during crystallization of magma.
hypocenter	hypocentrum zemětřesení	Synonym for the focus of an earthquake.
chalk	křída	A very fine-grained bioclastic limestone, which often forms high white cliffs on the coast.
chalkopyrite	chalkopyrit	Metallic mineral with formula $CuFeS_2$. Golden yellow or greenish yellow in colour. Hardness is 3.5 to 4. Massive.
chemical sedimentary rocks	chemické sedimentární horniny	A sedimentary rocks composed of material precipitated directly from solution.
chemical weathering	chemické zvětrávání	The decomposition of rock resulting from exposure to water and atmospheric gases.
chert	rohovec	A hard, compact, fine-grained sedimentary rock formed almost entirely of silica.
chlorite	chlorit	Mineral belonging to mica group formed mostly during metamorphism. It can be also formed by alteration processes. Green to blackish green in colour. Dull to pearly luster. Hardness 2 to 2.5. May have faint green-yellow streak. Crystal flakes are flexible but not elastic. Finely crystalline aggregates common.
ice cap	ledovcová čapka	A glacier covering a relatively small area of land but not restricted to a valley.
ice sheet	kontinentální ledovec	A glacier covering a large area (more than 50 000 square kilometers) of land.
iceberg	ledovec	Block of glacier-derived ice floating in water.
idiomorphic minerals	idiomorfně omezené minerály	Completely confined mineral grains formed during crystallization of magma.
igneous rocks	vyvřelé horniny	A rocks formed or apparently formed from solidification of magma.
illite	illit	Non-swelling type of clay mineral. Properties see clay minerals.
inner core	vnitřní jádro	The most inner part of the Earth.
intermediate igneous rocks	intermediární vyvřelé horniny	Igneous rocks with a chemical content between felsic and mafic compositions.
intrusive bodies	intruzivní tělesa	Bodies formed by magma crystallization under the earth surface.
intrusive rocks	intruzivní horniny	Rocks that appears to have crystallized from magma emplaced in surrounding rock.
isoclinal fold	izoklinální vrása	A fold in which the limbs are parallel to one another.
isostasy	izostáze	The balance or equilibrium between adjacent blocks of crust resting on a plastic mantle.
isostatic adjustment	izostatické vyrovnání	Concept of vertical movement of sections of the earth's crust to achieve balance or equilibrium.
izometric shape	izometrický tvar	Term describing ball-like shape of mineral grains.
joint	prasklina, trhlina	A fracture or crack in bedrock along which essentially no displacement has occurred.
Jurassic	jura	A period in Mesozoic (145-195 million of years ago).
K-feldspars	draselné živce	Subgroup of feldspars containing potassium in the structure ($KAlSi_3O_8$). Properties see feldspars.
kaolin	kaolin	Sediment composed mostly of clay mineral kaolinite. It was formed as a residual rock by processes of chemical weathering.
kaolinite	kaolinit	Non-swelling member of clay mineral group. Properties see clay minerals.
karst	kras	An area formed mostly of limestones with many sinkholes and a cave system beneath the land surface, usually lacking a surface stream.
kinetic metamorphism	dislokační metamorfóza	Special type of metamorphism caused by tectonic forces in a fold zone.
kyanite	kyanit	Mineral with formula Al_2SiO_5 formed during metamorphism. Light blue to greenish blue in colour, cleavaged. Hardness is 5 parallel to long direction of crystal and 7 across crystal. It forms blade-shaped crystals and has vitreous luster.

labradorite	labradorit	Member of plagioclase subgroup with special optical effects (it reflects daylight as blue in some slices). Properties see feldspars.
lamination	laminace	The layering or bedding less than 1 cm in thickness in a sediment or a sedimentary rock.
landslide	sesuv	The general term for a slowly to very rapidly descending rock or debris (see earthflow).
lateral erosion	boční eroze	Erosion and undercutting of stream banks caused by a stream swinging from side to side across its valley floor.
lateral moraine	boční moréna	A low ridgelike pile of till along a side of a glacier.
lava	láva	Magma on the earth's surface. Fluid rock such as that which issues from a volcano or a fissure in the earth's surface.
lava flow	lávový proud	Long, narrow stream of lava flowing downhill from a volcano.
lava sheet	lávový příkrov	Wide-spreaded sheet of lava covering large area around a volcano.
lepidoblastic texture	lepidoblastická struktura	Type of metamorphic texture formed mostly of scaled minerals.
limb	rameno vrásky	Portion of a fold shared by an anticline and a syncline.
limestone	vápeneč	A sedimentary rock composed mostly of calcite.
limonite	limonit	Limonite (Fe ₂ O ₃ .nH ₂ O). is a general name for several rust-like hydrous iron oxides. It usually forms rust-like coatings on rocks. Yellow-brown, orange-brown to dark brown in colour.
lithification	zpevňování (diageneze)	The consolidation of sediment into sedimentary rock.
lithosphere	litosféra	The rigid outer shell of the earth, 70 to 125 or more kilometers thick.
local metamorphic rocks	lokální metamorfované horniny	Rocks produced by local metamorphism.
local metamorphism	lokální metamorfóza	Metamorphism involving relatively high temperature or pressure which affects small area.
loess	spraš	A fine-grained deposit of wind-blown dust containing CaCO ₃ often in the form of "nodules".
loessloam	sprašová hlína	Eolic sediment formed by leaching of CaCO ₃ from loess.
losing stream		Stream that loses water to the zone of saturation.
lower mantle	spodní plášť	One of the inner shells of the earth.
luster	lesk	The quality and intensity of light reflected from the surface of a mineral.
macroscopically dense	makroskopicky celistvý	Type of rock texture (according to absolute size of grains) with macroscopically non-visible grains.
mafic rocks	tmavé vyvřelé horniny	Igneous rocks with low amount of silica. They are composed mostly of Fe, Mg rock-forming minerals.
magma	magma	Molten rock, usually mostly silica. It may contain dissolved gases as well as some solid minerals.
magma chamber	magmatický krb	Huge body of magma situated beneath the surface where magma is accumulated.
magnitude	magnitudo zemětřesení	A measure of the energy released during an earthquake.
mantle	zemský plášť	A thick shell of rock that separates the earth's crust above from the core below.
marble	mramor	A fine- or coarse-grained metamorphic rock composed of interlocking calcite (or dolomite) crystals.
marl	slín	Clay with high amount of CaCO ₃ (25-75%).
marl slate	slínitá břidlice	Clayshale with high amount of CaCO ₃ (25-75%).
marlite	slínovec	Partly lithified pelitic sediment with significant amount of CaCO ₃ (25-75%).
mass movement	svahový pohyb	Movement, caused by gravity, in which bedrock, rock debris, or soil moves downslope in bulk.
mass wasting	svahový pohyb	Equivalent term to mass movement.
massive structure	všesměrně zrnitá textura	Structure without stratification, flow-banding, foliation, schistosity, etc.
matrix	základní hmota	Fine-grained material found in the intergranular space between larger grains of sedimentary rocks.
meander	meandr	A pronounced sinuous curve along a stream's course.
meander cutoff		A new, shorter channel across the narrow neck of a meander.
medial moraine	střední moréna	A single long ridge of till on a glacier, formed by adjacent lateral moraines joining and being carried downglacier.
medium-grained rock	středně zrnitá hornina	Rock in which most of the grains are from 1 to 2 mm in size.
mechanical weathering	mechanické zvětrávání	The physical disintegration of rock into smaller pieces.

melaphyre	melafyr	Volcanic rock, formerly porous Mesozoic basalt where pores were secondary filled with other minerals. Its typical structure is amygdaloidal.
mesa	tabulová hora	A broad, flat-topped hill bounded by cliffs and capped with a resistant rock layer.
mesh structure	okatá textura	Structure of some metamorphic rocks composed of ellipsoidal mineral grains.
Mesozoic	mesozoický	Geological era that followed the Paleozoic Era and preceded the Cenozoic Era (from 225 to 65 mil. of years ago).
metallic luster	kovový lesk	Luster giving a substance the appearance of being made of metal.
metamorphic rocks	metamorfované horniny	Rocks produced by metamorphism.
metamorphism	metamorfóza	The transformation of preexisting rock into structurally or mineralogically distinct new rock as a result of high temperature, high pressure, or both, but without the rock melting process.
metaquarcite	metakvarcit	Metamorphic rock composed mostly of quartz with micas on foliation planes.
metaquartzite	metakvarcit	A rock composed of sand-sized grains of quartz that have been welded together during metamorphism.
micas	slídy	Group of minerals belonging to sheet-silicates with variable size of grains and colour. Significant properties are: hardness 2.5, perfect cleavage, glassy to pearl luster and elasticity of scales.
mid-oceanic ridge	stoedoceánský hobet	A giant mountain range that lies under the ocean and extends around the world.
migmatite	migmatit	Mixed igneous and metamorphic rock with typical migmatitic structures.
mineral	minerál	A naturally occurring, inorganic, homogenous, crystalline or amorphous mostly solid that has a definite chemical composition.
mineral content	minerální složení	Term describing composition of a rock.
mineral hardness	tvrdost minerálu	The relative easy or difficulty with which a smooth surface of a mineral can be scratched; commonly measured by Mohs' scale.
modified Mercalli scale	modifikovaná Mercalioho škála	Scale expressing intensities of earthquakes (judged on amount of damage done) in Roman numerals ranging from I to XII.
Moh's scale of hardness	Mohrova stupnice tvrdosti	Scale on which ten minerals are designated as standards of hardness.
Mohorovicie discontinuity	Mohorovicieova diskontinuita	The boundary separating the crust from the mantle beneath it (also called Moho).
monomict	monomiktní	Within the pselitic, clastic sedimentary rocks, formed from one type of fragments.
montmorillonite	montmorillonit	Swelling type of clay mineral. Properties see clay minerals.
moraine	moréna	A body of till either being carried on a glacier or left behind after a glacier has receded.
mud	bahno	Term loosely used for silt and clay, usually wet.
mudcracks	bahenní praskliny	Polygonal cracks formed in very fine-grained sediment as it dries.
mudflow	bahnotok	A flowing mixture of debris and water, usually moving down a channel.
mudpot	bahenní sopka	Specific type of hot spring that contains thick, boiling mud.
mudstone	slínovec	A fine-grained sedimentary rock that lacks shale's laminations and fissility.
muscovite	muskovit	Transparent or white mica that lacks iron and magnesium. Properties see micas.
nacreous luster	perleřový lesk	See pearly luster.
natural glass	vulkanické sklo	Amorphous form of silica formed by very fast cooling of lava.
nematoblastic texture	nematoblastická struktura	Metamorphic texture formed mostly of columnar or spicular minerals.
Neogene	neogenní	Younger epoch of Tertiary period (from 1.8 to 25 mil. of years ago).
oblique-slip fault		A fault with both strike-slip and dip-slip components.
obsidian	obsidian	Volcanic glass black in colour with typical conchoidal fracture.
oceanic crust	oceánská kůra	The thin, basaltic crust under oceans.
oceanic trench	hlbokomooský poikop	A narrow, deep through parallel to the edge of a continent or an island arc.
olivine	olivín	A ferromagnesian mineral with the formula (Fe, Mg) ₂ SiO ₄ . Yellowish green to green in colour, conchoidal fracture but not obvious cleavage, with vitreous luster. Hardness is 6.5 to 7. Most olivine occurs in a form of accumulations of small crystals in dark-coloured igneous rocks (e.g. basalt).

oolitic limestone	oolitický vápeneč	A limestone formed from a small spheres of calcite precipitated from seawater.
open fold	otevoená vrása	A fold with gently dipping limbs (angle between limbs 70-120).
orbicular structure	kulovitá textura	Special type of structure of plutonic rocks where feldspars are in concentric arrangement.
Ordovician	ordovický	Period in lower Paleozoic (from 435 to 500 mil. of years ago).
ore	ruda	Naturally occurring material that can be profitably mined.
organic sedimentary rocks	organogenní sedimentární hominy	Rocks composed mostly of the remains of plants and animals.
organic sediments	organogenní sediment	Sediments composed mostly of the remains of plants and animals.
orogeny	orogen	An episode of intense deformation of the rocks in a region, generally accompanied by metamorphism and plutonic activity.
orthoclase	ortoklas	A potassium feldspar with the formula $KAlSi_3O_8$. Properties see feldspars.
orthogneiss	ortorula	Type of gneiss formed from igneous rocks.
outcrop	výchoz	A surface exposure of bare rock, not covered by soil or vegetation.
outer core	vnější jádro	A thick shell of rock between inner core and lower mantle.
overturned fold	poekocená vrása	A fold in which both limbs dip approximately in the same direction.
oxbow lake	slepé rameno	A crescent-shaped lake occupying the abandoned channel of a stream meander that is isolated from the present channel by a meander cutoff and sedimentation.
P-waves	p-vlny	Compressional waves (seismic waves) in which rock vibrates parallel to the direction of wave propagation.
Paleogene	paleogen	Older epoch of Tertiary period (from 23.7 to 66.4 mil. of years ago).
Paleozoic	paleozoikum	Geological era that followed the Precambrian and during which began with the appearance of complex life, as indicated by fossils (from 245 to 570 mil. of years ago).
paragneiss	pararula	Type of gneiss formed from sedimentary rocks.
parent rock	mateená hornina	Original rock before being metamorphosed.
pearly luster	perle?ový lesk	A luster that gives a substance pearly appearance.
pebble	oblázek	A sediment particle with a diameter of 2 to 64 mm.
pegmatite	pegmatit	Extremely coarse-grained igneous rock formed mainly of feldspars and quartz together with micas and other minerals. It has zonal structure. In czech classification it belongs to dike rocks, in english classification to plutonic rocks.
pelagic sediment	pelagické sediment	Sediment made up of fine-grained clay and skeletons of microscopic organisms that settle slowly down through the ocean water to the sea bottom.
pelites	pelity	Within the clastic subgroup of sediments and sedimentary rocks the most fine-grained category (<0.002 mm).
pencil structure	stébelnatá textura	Rare type of structure of metamorphic rocks characterized by mineral grains which are extremely elongated along one axis and arranged in linear parallel structure.
perlite	perlit	Type of volcanic glass. It seems to be composed of many small particles "pearls".
permeability	permeabilita	The capacity of a rock to transmit a fluids (liquids or gases).
Permian	perm	The youngest period of Paleozoic (from 245 to 286 mil. of years ago).
phaneritic	faneritický	A textural term applied to igneous rocks in which all the crystals of the essential minerals can be distinguished with the unaided eye. The adjective form phaneritic is currently used more frequently than the noun.
phenocryst	porfyrická vyrostlice	Any of the large crystals in porphyritic igneous rock.
phonolite	znilec (fonolit)	Type of rock composed of feldspars, foids, pyroxenes and amphiboles.
phthanite	buli?nik	Biochemical sedimentary rock, mostly black in colour, composed of silica.
phyllite	fylit	A metamorphic rock in which clay minerals have recrystallized into microscopic micas, giving the rock a silky sheen.
pitch luster	smolný lesk	A luster that gives a substance pitch appearance.
pitchstone	smolek	Type of volcanic glass with typical pitch luster.
plagioclases	sodnovápenaté ?ivce	Subgroup of feldspars containing sodium and/or calcium in addition to aluminium, silicon, and oxygen. Properties see feldspars.
plate tectonics	desková tektonika	A theory that the earth's surface is divided into a few large, thick plates

		that are slowly moving and changing in size. Intense geologic activity occurs at the plate boundaries.
plateau	náhorní rovina	Broad, flat-topped area elevated above the surrounding land and bounded, at least in part, by cliffs.
plunging fold	vrása	A fold in which the hinge line (or axis) is not horizontal.
pluton	pluton	An igneous body that crystallized deep underground.
plutonic rocks	hlubinné horniny	Igneous rocks formed at great depth.
polar wandering	migrace pólu	An apparent movement of the earth's poles.
polymict	polymiktní(valouny více druhu)	Within psfetic sediments or sedimentary rocks, term describing composition of many types of fragments.
porcelanite	porcelanit	Metamorphic rock with typical conchoidal fracture and sharp edges which was formed by contact metamorphism of pelitic sediments.
pore space	intergranulární prostor	The total amount of space taken up by openings between sediment grains.
porosity	pórosita	The percentage of a rock's volume that is taken up by openings.
porous structure	pórovitá textura	Structure of a rock where part of rock volume is taken up by openings.
porphyritic texture	porfyrická struktura	Texture of those igneous rocks in which larger crystals (phenocrysts) are set in a finer groundmass which may be crystalline or glassy, or both.
porphyroblastic texture	porfyroblastická struktura	Texture of metamorphic rocks very similar to porphyritic texture of igneous rocks (groundmass cannot be glassy).
potassium feldspar	draselný živec	A feldspar with the formula $KAlSi_3O_8$.
Precambrian time	prekambrium	The vast amount of time that preceded the Paleozoic Era (before 570 mil. of years).
psammites	psamity	Clastic sediments or sedimentary rocks with sizes of particles between 0.06 and 2 mm.
pséfites	pséfity	Clastic sediments or sedimentary rocks with size of particles over 2 mm.
pyrite	pyrit	Mineral with formula FeS_2 with "gold" appearance. It is sometimes present as accessory mineral in igneous rocks.
pyroclastic rocks	pyroklastika	Rocks formed by lithification of pyroclasts.
pyroclasts	pyroklastika	Fragments of rocks formed by volcanic explosion.
pyroxene	pyroxen	Ferromagnesian mafic mineral which belongs to silicates. Black to dark-green in colour, vitreous to dull luster. Hardness is from 5 to 6. It has two imperfect cleavages meet at nearly 90 degrees (it is not often macroscopically visible). Shape is usually short columnar.
quarry	lom	An open or surface working, usually for the extraction of building stone, as slate, limestone, etc. In its widest sense the term mines includes quarries, and has been sometimes so construed by the courts; but when the distinction is drawn, mine denotes underground workings and quarry denotes superficial workings.
quartz	koemen	Mineral with the formula SiO_2 . In the nature it occurs in many different colours, but as a rock forming mineral it is usually light grey or grey in colour. Hardness is 7, usually forms allotriomorphic grains. They are macroscopically recognizable from feldspars by fracture planes with vitreous luster (no cleavage planes).
quartz diorite	koemenný diorit	Plutonic rock belonging to granitoid group, where plagioclases prevail over K-feldspars.
quartzite	koemenec	A quartz rock derived from sandstone, composed dominantly of quartz, and characterized by such thorough induration, either through cementation with silica or through recrystallization, that it is essentially homogeneous and breaks with vitreous surfaces that transect original grains and matrix or interstitial material with approximately equal ease.
Quaternary	kvartér	The youngest geological period; includes the present time (from 1.8 mil. of years ago to present).
receding glacier	ustupující ledovec (zmenšující se)	A glacier with a negative budget, which causes the glacier to grow smaller as its edges melt back.
Recent	recentní (současný)	Formed in the present time.
recumbent fold	ležatá vrása	A fold overturned to such an extent that the limbs are essentially horizontal.
regional metamorphic rocks	regionální metamorfované horniny	Type of metamorphic rocks formed by the proces of regional metamorphism.
regional metamorphism	regionální metamorfóza	Metamorphism involving relatively high temperature and pressure which affects large areas.
recharge		The addition of new water to an aquifer or to the zone of saturation.

residual rocks	reziduální horniny	Remaining part of parent rock after weathering which was not transported. It is often fragmented and caving.
resinous luster	smolný lesk	See pitch luster.
reverse fault	poesmyk	A fault in which the hanging-wall block moved up relative to the footwall block.
rhyolite	ryolit	A fine-grained, felsic, volcanic igneous rock made up mostly of feldspar and quartz. Often with porous and fluidal structure.
rift valley	riftové údolí	A tensional valley bounded by normal faults. Rift valleys are found at diverging plate boundaries on continents and along the crest of the mid-oceanic ridge.
rigid zone		Upper part of a glacier in which there is no plastic flow.
Richter scale	Richterova stupnice	A numerical scale of earthquake magnitudes.
ripple marks	eeoiny	Small ridges formed on sediment surfaces exposed to moving wind or water. The ridges form perpendicularly to the motion.
rock	hornina	Rock is inhomogeneous mineral association which forms the earth's crust in a form of many separated units. Every rock is characterized by structure, texture and mineral composition reflecting its origin.
rock avalanche		A very rapidly moving, turbulent mass of broken-up bedrock.
rock forming minerals	horninotvorné minerály	Group of minerals that form greatest part of rock volume.
rock strength	pevnost horniny	Ability of rock to resist to surrounding pressure.
rockfall	skalní oicení	Rock falling freely or bouncing down a cliff.
rounding	zaoblení	The grinding away of sharp edges and corners of rock fragments during transportation.
rupture	koehká deformace	Brittle deformation of rock.
S-waves	S-vlny	A seismic waves propagated by a shearing motion, which causes rock to vibrate perpendicular to the direction of wave propagation.
sand	písek	Sediment composed of particles with a diameter between 2 mm and 0.06 mm.
sand dune	písečné duny	A mound of loose sand grains heaped up by the wind.
sandstone	pískovec	A medium-grained sedimentary rock (grains between 2 mm and 0.06 mm) formed by the cementation of sand grains (mainly quartz).
saturated zone	nasycená zóna	A subsurface zone in which all rock openings are filled with water.
scaled shape	šupinkovitý	Sheet-like mineral shape (e.g. micas).
sea-floor spreading		The concept that the ocean floor is moving away from the mid-oceanic ridge and across the deep ocean basin, to disappear beneath continents and island arcs.
sediment	nezpevninová usazená hornina	Loose, solid particles that can originate by (1) weathering and erosion of preexisting rocks, (2) chemical precipitation from solution, usually in water, and (3) secretion by organisms.
sedimentary environment	sedimentární prostředí	Area with specific conditions for deposition which are approximately the same on every place within the area.
sedimentary rocks	zpevninová usazená hornina	Rock that has formed from (1) lithification of any type of sediment, (2) precipitation from solution
sedimentation	sedimentace	See deposition.
seismic waves	seismické vlny	A wave of energy produced by an earthquake.
seismogram	seismogram	Paper record of earth vibration.
seismograph	seismograf	A seismometer with a recording device that produces a permanent record of earth motion.
sericite	sericit	Very fine-grained variety of muscovite. Mineral grains are usually not visible. The presence of sericite in a rock can be easily identified by typical silk luster. It is mineral typical for metamorphic rocks. Properties see micas.
serpentine	serpentin	Mineral typical for metamorphic rocks. Very dark green to black in colour, hardness varies from 3 to 5. Luster is dull to greasy, slight greasy feel. It forms very fine-grained (macroscopically massive) accumulations.
serpentinite	serpentinit	Type of metamorphic rock composed mostly of mineral serpentine. It is usually dark green to green-black in colour, massive and macroscopically dense. Joints of this rock are usually filled with chrysotile (asbestos).
shale	bojlice	A fine-grained sedimentary rock (grains finer than 0.06 mm in diameter) formed by the cementation of silt and clay (mud). Shale has thin layers (laminations) and an ability to split (fissility) into small chips.

shear force		The component of gravitational force that is parallel to an inclined surface.
shear strength	smyková pevnost	The resistance to movement or deformation of material.
shear stress	smykové napětí	Stress due to forces that tend to cause movement or strain parallel to the direction of the forces.
sheet joints		Cracks that develop parallel to the outer surface of a large mass of expanding rock, as pressure is released during unloading.
shelf	šelf	Zone of sea bottom along all continents with varying width and dip 0.1%. It is bordered from one side by continental slope and from other side by continent.
shock metamorphism	šoková metamorfóza	The fastest type of metamorphism affecting surrounding rocks usually in tenths of second.
shrinking	smršňování	Decreasing of mineral and rock volumes caused by lowering of moisture.
schist	krystalická boidlice	A metamorphic rock characterized by coarse-grained minerals oriented approximately parallel.
silica	oxid křemíčitý	A term used for oxygen plus silicon.
silicate	silikáty	A substance that contains silica as part of its chemical formula.
sill	ložní žíla	A tabular intrusive structure concordant with the country rock.
sillimanite	silimanit	Mineral typical for metamorphic rocks. White, pale green or brown in colour, hardness varies from 6 to 7. It forms long, slender crystals, commonly as groups of parallel crystals.
silt	prach	Sediment composed of particles with a diameter of 0.002 mm to 0.06 mm.
siltstone	prachovec	A sedimentary rock consisting mostly of silt grains.
Silurian	silur	Geological period of Paleozoic between 408 and 438 mil. of years ago.
sinkhole	závrt	A closed depression found on land surfaces underlain by limestone.
sinter	sintr	A deposit of silica that forms around some hot springs and geysers.
slate	boidlice	A fine-grained rock that splits easily along flat, parallel planes.
slide	sesuv	In mass wasting, movement of a descending mass along a plane approximately parallel to the slope of the surface (see landslide).
slip	sesuv	In mass wasting, movement of a descending mass along one or more well-defined surfaces (see landslide).
slope angle	úhel sklonu svahu	Dip angle of a slope.
slump	sesuv	In mass wasting, movement along a curved surface in which the upper part moves vertically downward while the lower part moves outward (see landslide).
snow line	snižovací čára	An irregular line making the highest level to which the winter snow cover on a glacier is lost during a melt season.
soil	(1) půda, (2) zemina	(1) A layer of weathered, unconsolidated material on the top of bedrock; often also defined as containing organic matter and being capable of supporting plant growth. (2) Geotechnical term for sediments, caving residual and volcanoclastic rocks.
soil moisture	vlhkost zeminy	Term expressing amount of water in soil by ratio between weight of water in a soil sample and weight of dry soil sample.
solifluction	soliflukce	Flow of water-saturated debris over impermeable material.
sorting	točidání	Process of selection and separation of sediment grains according to their grain size (or grain shape or specific gravity).
specific gravity	specifická hmotnost	The ratio of the mass of an equal volume of water, determined at a specified temperature.
spring	pramen	A place where water flows naturally out of rock onto the land surface.
stalactite	stalaktit	Iciclelike pendant of dripstone formed on cave ceilings.
stalagmite	stalagmit	Cone-shaped mass of dripstone formed on cave floors, generally directly below a stalactite.
state of crystallization	stavení krystalizace	
staurolite	staurolit	Typical mineral of metamorphic rocks famous for its twinned crystals that form into the shape of a cross (or into the shape of the letter "X"). Shape of crystals is columnar. Color is reddish-brown, brown, or black. Hardness is 7-7.5. Luster is vitreous to resinous to dull. Cleavage poor, in one direction. Fracture is uneven to conchoidal.
stock	peo	A small discordant pluton with an outcropping area of less than 100 square kilometers.

strain	deformace	Change in size (volume) or shape of a body (or rock unit) in response to stress.
streak	vryp	Color of pulverized substance; a useful property for mineral identification.
stream gradient		Downhill slope of a stream's bed or the water surface, if the stream is very large.
stream piracy		The natural diversion of the headwaters of one stream into the channel of another.
stream terraces	oění terasy	Steplike landforms found above a stream and their flood plains.
stress	tlak	A force acting on a body, or rock unit, that tends to change the size or shape of that body, or rock unit. Force per unit area within a body.
striations	podélné rýhování	(1) On minerals, extremely straight, parallel lines; (2) Glacial-straight scratches in rock caused by abrasion by a moving glacier.
strike	smir plochy	The compass direction of a line formed by the intersection of an inclined plane (such as a bedding plane) with a horizontal plane.
strike-slip fault	horizontální posun	A fault in which movement is parallel to the strike of the fault surface.
structural geology	strukturní geologie	The branch of geology concerned with the internal structure of bedrock and the shapes, arrangement, and interrelationships of rock units.
structure	textura	Macroscopically distinguishable arrangement of mineral grains in a rock.
subduction zone	subdukení zóna	Mostly macroscopically distinguishable arrangement of mineral grains in a rock.
submarine canyon	podmooský kaon	V-shaped valley that run across the continental shelf and down the continental slope.
superposition	superpozice	A principle or law stating that within a sequence of undisturbed sedimentary rocks, the oldest layers are on the bottom, the youngest on the top.
surface waves	povrchové vlny	A seismic waves that travel on the earth's surface.
swelling	bobtnání	Increasing of mineral and rock volumes caused by raising of moisture.
syenite	syenit	A plutonic igneous rock consisting principally of alkali feldspar, usually with one or more mafic minerals such as hornblende or biotite. A small amount of plagioclase may be present. Also of quartz if less than 5%. Quartz-free granite. Name from Syene (Aswan), where it was later renamed "Aswan red granite".
syncline	synklinála	A fold in which the layered rock usually dips toward an axis.
tabular shape	tabulkovitý tvar	Table-like shape of minerals in a rock (e.g. feldspars). Two of three crystallographic axes are elongated, one is short. A fold in which the layered rock usually dips toward an axis.
talc	mastek	The softest mineral formed by metamorphic processes. It is the first member of Moh's scale.
tectonic forces	tektonické síly	Forces generated from within the earth that result in uplift, movement, or deformation of part of the earth's crust.
tension fault	tahový zlom	Fault in the earth's crust created by tensional forces.
tensional stress	tahové napětí	A force that tends to elongate or pull apart a body.
terminus	eeo ledovce	The lower edge of a glacier.
terrigenous sediment	suchozemský sediment	Land-derived sediment that has found its way to the sea floor.
Tertiary	toetihory	Older period of Cenozoic (from 1.6 to 66.4 mil. of years ago).
texture	struktura	Macroscopically and microscopically distinguishable characteristics (size of particles, shape of particles, state of crystallization) of a rock.
thrust fault	nasunutí	A reverse fault in which the dip of the fault plane is at a low angle to horizontal.
till	till	Unsorted and unlayered rock debris carried by a glacier.
tillite	tílit	Lithified till.
tourmaline	turmalín	Black, pink, blue, green or brown mineral with vitreous luster. Hardness is from 7 to 7.5. It forms slender crystals with triangular cross-sections and striated sides.
trachyte	trachyt	Felsic volcanic rock composed mostly of K-feldspars, acidic plagioclases, biotite and hornblende.
transform boundary	transformní rozhraní	Boundary between two plates that are sliding past each other.
translucent	prusvitný	Term for a substance which transmits light, but if you place this substance over an image on paper you will not see it.
transparent	pruhledný	Term for a substance which transmits light and if place this substance

		over an image on paper you will see it.
transportation	poenos (transport)	The movement of eroded particles by agents such as rivers, waves, glaciers, or wind.
travertine	travertin	A porous deposit of calcite that often precipitates around springs that contain high amount of CaCO ₃ .
Triassic	trias	The oldest period in Mesozoic (from 208 to 245 mil. of years ago).
tsunami	tsunami	Huge ocean wave produced by displacement of the sea floor; also called seismic sea wave.
tuff	tuf	A rock formed from fine-grained pyroclastic particles (ash and dust).
turbidity current	turbiditní proud	A flowing mass of sediment-laden water that is heavier than clear water and therefore flows downslope along the bottom of the sea or a lake.
U-shaped valley	údolí tvaru U	Characteristic cross-profile of a valley carved by glacial erosion.
ultrabasic rocks	ultrabazické horniny	Type of igneous rocks with small amount of silica (<44%) composed mostly of basic plagioclases, pyroxenes and amfiboles.
ultramafic rocks	ultramafické horniny	Rocks composed entirely or almost of ferromagnesian minerals (Colour index >90).
unconfined aquifer	volná zvědeň	A partially filled aquifer exposed to the land surface and marked by a rising and falling water table.
unsaturated zone	nenasyčená zóna	A subsurface zone in which rock openings are filled partly with air and partly with water; above the saturated zone.
upper mantle	svrchní plášť	One of the inner shells of the earth.
valley glacier		A glacier confined to a valley. The ice flows from a higher to a lower elevation.
varve	varva	Two thin layers of sediment, one dark and other light in color, representing one year's deposition in a lake.
ventifact	hranec	Boulder, cobble, or pebble with flat surfaces caused by the abrasion of wind-blown sand.
viscosity	viskozita	Resistance to flow.
vitreous luster	skelný lesk	See glassy luster.
volcanic ash	vulkanický popel	Fine grained material (<2 mm) composed of rock fragments formed by volcanic explosion.
volcanic neck		An intrusive structure that apparently represents magma that solidified within the throat of a volcano. It forms isolated hill in surrounding denudated landscape.
volcanism	vulkanismus	Volcanic activity, including the eruption of lava and rock fragments and gas explosions.
volcano	sopka	A hill or mountain constructed by the extrusion of lava or rock fragments from a vent.
volcanoclastic rocks	vulkanoklastické horniny	Rock formed by lithification of rock fragments erupted from a volcano. Mineral composition is very similar to igneous rocks, structures and textures are similar to clastic sedimentary rocks.
water table	hladina podzemní vody	The upper surface of the zone of saturation.
weak zone	oslabená zóna	Zone in rock massif where rock properties are significantly worse than in surrounding rock.
weathering	zvětrávání	The group of processes that change rock at near the earth's surface.
well	studna, sonda, vrt	A hole, generally cylindrical and usually walled or lined with pipe, that is dug or drilled into the ground to penetrate an aquifer below the zone of saturation.
wind ripples		Small, low ridges of sand produced by the saltation of windblown sand.
xenolith	xenolit	Fragment of rock distinct from the igneous rock in which it is enclosed.
zone of accumulation	zóna akumulace	That portion of a glacier with a perennial snow cover.
zone of aeration	provzdušňovací zóna	See unsaturated zone.
zone of leaching	zóna vyluhování	Top layer of soil characterized by downward movement of water which leaches some mineral components.
zone of plastic flow	zóna plastického tečení	Lower zone of a glacier where plasticity limit of ice is exceeded.
zone of wastage	zóna tání	That portion of a glacier in which ice is lost or wasted.