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oasis. A limited area in a desert supplied with water^[16].

obruk. Turkish form for a vertical or steep-sided depression or shaft in karst, often formed by collapse of roof of an underground cave or cavern. When the depression contains a lake or pond, it is known as 'sulu obruk' or 'obruk gölü'. When it is dry, it is called 'kuru obruk' or just 'obruk'. Synonyms: (French.) *obruk*; (German.) *Schlot*; (Greek.) 'obruk' (*káthetos karstikós lákkos*); (Italian.) *pozzo carsico*; (Spanish.) *torca*; (Turkish.) *obruk*; (Yugoslavian.) *jama*. See cenote, dolina, jama, pit, shaft, sinkhole.

obsequent river. A river flowing in a direction opposite to that of the dip of the underlying strata^[16].

observation well. A well drilled for the purpose of observations such as water level or pressure recordings^[16].

oceanic water. Sea water with a total salt content of about 34,500 ppm^[16].

ojo, ojo de agua. (Spanish.) An artesian spring in limestone regions, especially one forming a small pond; a *vauculian spring*^[10].

olivenite. A cave mineral — $\text{Cu}_2(\text{AsO}_4)(\text{OH})$ ^[11].

omnivore. An animal that habitually eats both plants and animals^[23]. See also *carnivore*; *herbivore*; *insectivore*.

onyx marble. Translucent layers of calcium carbonate from cave deposits, often called Mexican onyx or cave onyx; used as an ornamental stone^[10].

oolite. A type of limestone that is composed largely or partly of ooliths. Also known as oolitic limestone. The best known examples in Britain, within the Jurassic limestone sequence of the Cotswolds, are of only moderate strength, very porous and only weakly cavernous. In contrast, oolites of early Carboniferous age have hosted extensive cave development beneath Mynydd Llangattwg and in other parts of South Wales^[9].

oolith. A small ovoid to spherical accretionary particle, usually composed of concentric layers of calcium carbonate. Such ooliths, cemented together by calcium carbonate, iron salts or other minerals, are the major constituent of oolite or oolitic limestone^[9].

oolitic. Of spherical or ovoidal shape^[16].

opal. A cave mineral — $\text{SiO}_2 \cdot n\text{H}_2\text{O}$ ^[11].

open system. A system where matter and energy may cross a system boundary^[16].

open traverse. A traverse which does not close onto a survey point of known coordinates and orientation or onto itself^[25].

Opferkessel. See solution pan.

optical brighteners. Material contained in laundry detergents to make 'whites whiter' and used in environmental tracing studies. Common types are, Tinopal

CBS-X, Tinopal 5BM GX, and Phorwite BBH Pure. Dye type: *Stilbene*. See also fluorescent dyes.

ore karst. Formation of interstices, caverns caves and other karst forms produced by solution in water from thermal springs and ore-bearing solutions^[20]. Synonyms: (French.) *karst minier*; (German.) *Zwischenräume, Kavernen, Höhlen im Karst, gebildet durch Thermalwässer oder erzhaltige Lösungen*; (Greek.) *thermometallikon karst*; (Italian.) *carsismo per dissoluzione idrotermale*; (Russian.) *rudnij karst*; (Spanish.) *karst termomineral*; (Turkish.) *cevher karstı*; (Yugoslavian.) *rudni kŕs(kras)*.

organic. Pertaining to anything that is or ever was alive or produced by a living plant or animal. Organic material brought into the cave from outside is virtually the only source of food for cave dwellers^[23].

organic deposit. Deposits of calcareous and siliceous remains of animals^[16].

organic pollution. Contamination originating from organic sources^[16].

orientation. 1. The assignment or imposition of a definite direction in space; the act of establishing the correct relationship in direction, usually with reference to the points of the compass. Also, the of being in such relationship. 2. In describing crystal form and symmetry, the placing of the crystal so that its crystallographic axes are in the conventional position. 3. The direction in which an aerial photograph is turned with respect to observer or map. A single photo is best oriented for study when turned so that the shadows are cast toward

the observer. 4. Directional arrangement of nonspherical grains in a sand aggregate^[16].

original dip. Dip due to deposition of sediments^[16].

original interstice. Interstice formed during rock formation stage^[16].

orographic precipitation. Precipitation due to mechanical lifting of air over a ground relief^[16].

orthogonal. Perpendicular.

otkrytyj karst. (Russian.) See naked karst.

oulopholite. See cave flower.

outcrop. An open exposure of bedrock or otherwise buried material^[16].

outflow cave. Cave from which stream flows out or formerly did so^[10].
Synonym: effluent cave.

outlet cave. A cave developed at the point of re-emergence of an underground karst watercourse^[19].

output point. A point where water exists from an underground drainage route or aquifer. An obvious output point is a surface resurgence or exurgence, where drainage emerges from a conduit system. Less obvious are points where drainage leaves a carbonate aquifer and enters an adjacent non-carbonate bed, such as a sandstone aquifer^[9].

outwash. Stratified sand and gravel removed or washed out from a glacier by

meltwater streams and deposited in front of or beyond the end moraine or the margin of an active glacier. The coarser material is deposited nearer to the ice^[6].

outwash gravel. Glacial drift material deposited by streams from a glacier^[16].

outwash plain. Plain in front of a glacier that is composed of outwash material^[16]. A broad, gently sloping sheet of outwash^[6].

ouvala. (French.) See uvala.

oven-dry. The degree of dryness of a porous sample after drying in an oven at a specified temperature^[16].

overbank area. An area covered by flood waters overtopping natural or artificial river banks^[16].

overburden. 1. The loose soil, sand, silt, or clay that overlies bedrock. In some usages it refers to all material overlying the point of interest. 2. The total cover of soil and rock overlying an underground excavation.

overburden pressure. The pressure exerted by weight of the overburden column^[16].

overflow spring. See spring, overflow.

overland flow. Surface runoff flowing over the land surface towards a channel^[16].

overthrust. Upthrust fault with a very low angle of dip and a relatively large net displacement^[16].

oxbow. Abandoned loop of a stream course, Original usage, applied to surface rivers, describes short-circuited meander loops but in caves the term is applied to dry loop passages of any shape and origin^[9].

oxidation. The combining of an element with oxygen^[6].

oxygen demand. The ability of substances to utilize dissolved oxygen in water.

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www.utexas.edu/depts/tnhc/.www/biospeleology

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<http://wasg.iinet.net.au/terminol.html>

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