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Competitive Exams: Geology Glossary C to G

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Geology Glossary: C to G

- Cabochon ... The cut of a gemstone that has a convex surface. A cab.
- Cameo ... A carved shell, sometimes cut from onyx or other mineral containing bands of different colors, To cut in relief, the opposite of intaglio.
- Carat ... Unit of weight used to weigh gemstones, equal to 200 milligrams, or. 200 grams. 1 gr. = 5 ct. 100 points = 1 ct. Metric system.
- Cataclastic rock ... A metamorphic rock produced by the crushing and grinding of preexisting rocks, which are still visible as crushed fragments.
- Chatoyancy ... Cat's eye effect produced by some gemstones when cut properly in cabochon. See asterism.
- Chelsea Filter ... A dichromatic color filter transmitting light of only two wavelengths, one deep red the other yellow green. Used to discriminate between emerald and synth. Spinel and green glass colored with cobalt.
- Chemical Element ... Matter composed of atoms of only one chemical type which cannot be decomposed into simpler substances by chemical methods.
- Clastic rock ... Sedimentary rock made up of fragments of preexisting rocks and transported into the place of deposition.
- Cleavage ... The tendency of stones to split along one or more definite directions, always parallel to a possible crystal face.
- Conchoidal. (fracture) . A breakage which leaves a conchoidal shell shaped surface.
- Conglomerate (as in geology). Conglomerates, as well as sedimentary breccias, are coarse-grained SEDIMENTARY ROCKS formed by the consolidation and hardening of, respectively, rounded and angular gravel deposited in oceans. More than 30 percent of the large particles of these rocks exceed 2 mm (0.08 in) in diameter. The particles may be pebbles, cobbles, or boulders, or mixtures of these sizes. Both conglomerates and sedimentary breccias may be named and classified by the proportion of gravel-sized particles; the type of matrix, and the types of gravel-sized particles. The proportion of gravel is a function of the highest current speed at the

time of deposition and the availability of particles of such coarse size. A sample that is more than 80 percent pebbles, cobbles, or boulders is called a conglomerate proper, whereas one that is 30 to 80 percent is an arenaceous (sandy) conglomerate or an argillaceous (shaley) conglomerate. The matrix between the layers of coarse particles may also be calcareous (that is, containing calcium carbonate) or sideritic (containing ferrous carbonate). On the basis of the variety of pebbles, cobbles, and boulders in conglomerates, they can be classified as oligomictic, consisting of a single kind of rock (such as one of various varieties of chert and quartzite or other rock), or polymictic, containing many kinds of rock.

- Concretion ... Knobby or rounded mineral concentrations in sedimentary rocks that are completely surrounded by rock.
- Contact metamorphism ... The change of rock due to the effect of high temperatures during contact with a lava flow, magma sloping, or igneous intrusion.
- Critical Angle ... The angle at which a ray of light passes from one medium to another, as a gemstone and air. Cryptocrystalline______ The structure of a substance as chalcedony, that consist of very small crystals but show no external sign of crystal structure.
- Crystal. A homogeneous body in the form of a geometric solid bonded by polyhedral faces, the nature of which is expression of the orderly and periodic arrangement of its constituent atoms.
- Crystal Axes ... "Lines" passing through a crystal in important symmetric directions, intersecting at the center of the crystal.
- Crystal Systems ... The six main groups into which crystals can be classified: Triclinic, monoclinic, orthorhombic, cubic, tetragonal and hexagonal.
- Decrepitation ... The explosive shattering of mineral grains on heating.
- Dendrites ... Skeletal crystals that develop from supersaturated solutions, often in small cracks, often resembling plant or trees.
- Density ... The ratio of the weight of a substance to its volume expressed in g/cm 3, and numerically equal to the specific gravity.
- Detrital ... Occurrence of minerals in gravels that came from a mineral deposit (placer).
- Diaphaneity ... Showing light through its substance; transparent; translucent.
- Dichroism ... Possessing the property of showing two different colors when viewed from different angles.
- Dike ... In the forming of rocks, when intruding sedimentary rocks in a vertical or nearly vertical position.

- Dispersion. The separation of white light into its constituent colors by its refraction or diffraction.
- Double Refraction ... Ability of certain crystals to split incident light into two rays with different refractive indices.
- Doublets ... A common method of building up sufficient thickness to permit a gem to be used in a setting. A non gem mineral is cemented to the top or bottom of the gem material (See Opals.).
- Dripstone ... Stalagmites or stalactites
- Druse ... A crystal coated surface of rock.
- Doctile ... Able to be drawn into a wire.
- Endogenous ... Generated deep in the earth by volcanism or earthquakes.
- Enhydro ... A chalcedony or carnelian geode having the center cavity filled with water.
- Epithermal vein ... Formed at shallow depths from ascending hot solutions.
- Epizone ... In regional metamorphism, the depth level nearest the surface to approx. 3.75 to 4.25 miles.
- Extinction ... Diminution in the intensity of radiation due to absorption by or scattering in the medium; also the stopping of incident X-rays by the outer layers of atoms in a crystal.
- Extraordinary Ray ... Crystals and minerals belonging to the hexagonal tetragonal systems in which the ray or refractive index varies according to its direction through the crystal.
- Extrusive rock ... Igneous rock that solidifies on the surface of the earth.
- Facet ... Man made flat part of a mineral, a planar surface.
- Ferromagnetism ... Magnetic even in the absence of an external magnetic field.
- Fire ... Same as dispersion
- Fluorescence ... Temporary emission of radiations of different wavelength (color) by a substance struck by light waves usually long or short wave ultraviolet light.
- Fluvial ... Deposits from rivers.
- Foliated ... Made up of thin leaves, like mica.
- Formulas ... For weight estimation based on measurements in millimeters to $\frac{1}{10}$. Assuming well cut stones with little or no bulge factor. Some formulas for various gem cuts.

- Fracture ... A break with an uneven or irregular surface.
- Fraunhofer Lines ... A series of groups of dark lines in the spectrum of an object, visible using a spectroscope.
- Friable ... Easily crumbled or pulverized.
- Fumaroles ... Spots in or near active volcanos where gases are expelled.
- Gabgue ... The minerals of no value in veins with ore minerals.
- Gamma rays ... Short wave electromagnetic waves.
- Gangue ... Minerals of no value associated in veins with ore minerals.
- Geniculated ... Knee like intergrowths of crystals.
- Geode ... A stone having a cavity lined with crystals; the cavity in such a stone.
- Girdle ... The wide part of a cut gemstone
- Gliding plane ... Acrystal direction along which the atoms can slip a defined distance without destroying the coherence of the crystal.
- Grain ... (Troy system) . 480 grains to the oz.

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