

Glossary of Terms Used in Petrographic Descriptions

- anorthite - triclinic plagioclase feldspar with the composition $(\text{Ca}_{90-100}, \text{Na}_{10-0}) \text{Al}_2\text{Si}_2\text{O}_8$
- anorthosite - rock name for an igneous rock (or lithic fragment) composed almost entirely of plagioclase (usually calcic plagioclase). Lunar anorthosites have a granulitic texture.
- basalt - a fine grained, usually dark colored, igneous rock which commonly is extrusive in origin. Composition of basalt, ordinarily, includes primarily calcic plagioclase, pyroxene, and other mafic minerals, such as olivine.
- breccia - a clastic rock with angular and broken rock fragments in a finer grained matrix. For purposes of this catalog, breccia fragments larger than 1 mm are designated as clasts, and those smaller than 1 mm are referred to as matrix.
- clast - fragmental part of a breccia larger than 1 mm. A clast may be lithic, mineral, or glass in lunar breccias.
- coherent- consolidated; not friable; doesn't crumble easily
- crystallite- a broad term applied to grains or crystals which are too small for identification
- dendritic - minerals that have crystallized in a branching or feathery pattern, commonly in a glassy matrix
- devitrified - said of a glass which has converted to a crystalline texture after its solidification
- fragmental rock - any clastic rock; rock composed of fragments of other rocks, minerals, or glass; includes breccias and microbreccias
- friable - said of a rock that crumbles naturally or is easily broken; poorly consolidated; poorly cemented; not coherent
- gabbro - coarse grained equivalent of basalt, commonly intrusive in origin
- "glass" - a term used in optical petrographic descriptions to denote amorphous and/or cryptocrystalline material
- leucocratic - light colored; applied to a light-colored igneous rock relatively poor in mafic minerals
- matrix - smaller or finer grained material filling interstices between the larger grains or particles of a rock; for purposes of this catalog, portion of a breccia smaller than 1 mm in size
- melanocratic- dark colored; usually applied to dark colored igneous rock rich in mafic minerals
- melt rock - igneous rock which is neither intrusive nor extrusive in origin, but formed by melting during meteoroid impact. These rocks resemble basalts, but have "ghostclasts," or small areas of textural homogeneity enclosed in a fabric of a different texture; occasionally these exhibit remnant clasts, which appear as xenocrysts

mesocratic- composed of subequal amounts of light and dark constituents; applied to igneous rocks intermediate in color between leucocratic and melanocratic

mesostasis- the last-formed interstitial material, either glassy or aphanitic, of an igneous rock

microbreccia- a breccia with no clasts larger than 1 mm; a clast of a breccia from previous generation within another breccia

norite - a coarse grained plutonic rock containing calcic plagioclase and orthopyroxene

ophitic - texture of a holocrystalline, hypidiomorphic rock in which lath-shaped plagioclase crystals are partially or completely enclosed by pyroxene crystals

phenocryst- a term used for a large crystal in a porphyritic igneous rock

poikilitic- igneous rock texture in which small crystals of one mineral (e.g. plagioclase) are irregularly scattered without common orientation in a larger crystal of another mineral (e.g. pyroxene)

polymict- said of a breccia containing fragments of differing composition

seriate - texture in which grain size varies gradually or in a continuous series from large to small

subophitic- said of the ophitic texture of an igneous rock in which the feldspar crystals are approximately the same size as the pyroxene and are only partially enclosed by them

troctolite- a coarse grained plutonic rock containing calcic plagioclase and olivine, with little or no pyroxene

zap pit – micrometeoroid impact crater on a lunar sample; commonly lined with glass