

SOME COMMON ROCK TYPES IN THE SUNSHINE COAST AREA

IGNEOUS (Acidic – silica rich; Basic – silica poor. Silica is usually in the form of quartz and/or feldspar)

PLUTONIC Medium to large crystals (cools slowly at depth – many kilometres)

Sometimes displays very large crystals (phenocrysts) resulting in porphyritic texture.

Sometimes displays small to very large host rock inclusions (xenoliths). Sometimes extremely large host rock inclusions (roof pendants) at the margin of magma chamber/batholith.

Granodiorite, diorite, granite, gabbro

VOLCANIC Small to very small crystals (cools quickly at or near the earth's surface) – crystals may be so small as to appear glassy or subglassy.

Andesite, dacite, rhyolite, basalt, obsidian, volcanic ash, pyroclastics

extrusive

Could be deposited on land or in water.

Sometimes displays very large crystals (phenocrysts) resulting in porphyritic texture.

Sometimes displays large to very large blocks (or 'bombs') of host rock or other volcanic rock.

intrusive

Intruded into igneous, sedimentary or metamorphic rocks that are brittle enough to accept a 'plastic' or 'liquid' intrusion at a relatively shallow depth.

Sometimes displays very large crystals (phenocrysts) resulting in porphyritic texture.

Sills (sub horizontal) and dykes (sub vertical).

SEDIMENTARY

Consolidated

Conglomerate, sandstone, siltstone, shale, argillite, limestone, dolomite, chert.

Unconsolidated

Gravel, sand, silt, clay.

METAMORPHIC

Altered igneous, sedimentary or metamorphic rocks by heat and/or pressure.

Quartzite, argillite/slate, marble, gneiss, schist.

Peter Hews, 2019