

Mineral Environments

Sedimentary

- Detrital (weathering resistance)
 - Quartz, zircon, apatite, magnetite, ilmenite, cassiterite, gold, diamond.
- Evaporite
 - Calcite, gypsum, halite, sylvite, (+anhydrite, sulfur in salt domes)

Metamorphic (Regional)

- High Grade
 - Quartz, feldspar, muscovite, biotite, amphibole
kyanite, sillimanite, andalusite, garnet, epidote,
zoisite, staurolite, glaucophane, jadeite
- Low Grade
 - Zeolites, tridymite, cristobalite, opal, sodalite,
quartz, feldspar.

Igneous

- Silicic (felsic, acidic) (Granite and granodiorite)
 - Quartz, alkali feldspar, muscovite, biotite, magnetite, ilmenite, titanite, apatite.
- Basic (mafic) (Basalt, gabbro and peridotite)
 - Calcic plagioclase, biotite (phlogopite), clinopyroxene, orthopyroxene, olivine, magnetite, chromite
- Pegmatite
 - Tourmaline, spodumene, beryl, quartz, alkali feldspar, muscovite, lepidolite.

Hydrothermal

- Hydrothermal
 - Sulfides, quartz, calcite, cassiterite, gold, silver, copper, barite, celestine
- Oxidized Hydrothermal
 - Cerussite, anglesite, quartz, calcite, barite, limonite, goethite