

IGNEOUS ROCKS CLASSIFICATION

Igneous rocks form by direct crystallization of minerals from a magma melt; we see a surface expression of magmatic activity at sea-floor spreading ridges and other rift zones, volcanic arcs (subduction zones) and hot spots (intraplate volcanism).. **Intrusive (plutonic)** rocks crystallize at depth, whereas **extrusive (volcanic and pyroclastic)** rocks crystallize after the magma reaches the earth's surface. In general, extrusive rocks have a finer grained texture than intrusive rocks.

Igneous rocks are often classified according to the percentage of SiO_2 . The figure below is a general guide to igneous rock classification, showing the rock names and the differences in mineralogy.

