

# Science

[Science](#), [Physics](#)



563167 Magma forms with material derived from the mantle at divergent plate boundaries where the intense heat melts the geological material into the liquid magma. Granitic magma may form from the recycling through melting of older crust material (i. e., metamorphosed igneous or sedimentary rocks).

Many kilometers below the Earth's surface, magma flows into cracks or underground chambers. As it flows, it continues to pick up materials that contain minerals. The type of rock that is formed from magma that picks up material as it flows is called intrusive rock.

The picked up material forms crystals usually made up of common silicate minerals and dispersed among the magma as it cools very slowly over thousands to millions of years.

Slowly cooling igneous rock will usually contain larger mineral crystals than igneous rock that cools more quickly. Granite is a typical intrusive igneous rock, its coarse grain size signifying slow cooling and crystallisation.

Intrusive igneous formations can be forced to the surface of the earth where they can exist as masses of rock known as plutons.

.