Granite

The granitization theory states that granite is formed in place by extreme metamorphism.

The History Says

The 'alphabet soup' scheme of Chappel & White was proposed initially to divide granites into I-type granite (igneous protolith) and S-type granite (sedimentary protolith). Both of these types of granite are formed by melting of high grade metamorphic rocks, either other granite or depleted mantle, or buried and subducted sediment, respectively.

The Present Scenario

Granite has been extensively used as a dimension stone, flooring tiles in public and commercial buildings and monuments, and in kitchens.

Granite is a common and widely-occurring group of intrusive felsic igneous rocks. It consosits of orthoclase and plagioclase feldspars, quartz, hornblende, biotite, muscovite and minor accessory minerals, like magnetite, garnet, zircon and apatite. Ordinary granite always contains a small amount of plagioclase. With the absence of plagioclase, it is known as alkali granite.

Uses of Granite

The Red Pyramid, third largest Egyptian pyramids, of Ancient Egypt (c. 26th century BC) was made by granite. Menkaure's Pyramid, dating in the same era, was also constructed with granite blocks apart from limestone. The Gread Pyramid of Giza (c. 2580 BC) has a huge granite sarcophagus fashioned of "Red Aswan Granite." The ruined Black Pyramid during the reign of Amenemhat III had a polished granite pyra

midion or capstone. It is now on display in the main hall of the Egyptian Museum in Cairo. The Ancient Egypt also used it in door lintels, sills, jambs, and wall and floor veneer.

Currently, granite is extensively being used as a dimension stone and as flooring tiles in and public as well as commercial buildings and monuments. The polished granite is a demanding choice for kitchen countertops because of its high durability and aesthetic qualities. In sports world, curling rocks are traditionally being fashioned of granite.

Occurrences of Granite

Granite occurs even in a very small mass, like 100 km2, and as large as batholiths, which is often associated with orogenic mountain ranges and is frequently of great extent. Smaller dikes of granite composition, known as aplites, are associated with granite margins. In some locations, a very coarse-grained pegmatite masses occur with granite.

Granite occurred into the Earth's crust during all geologic periods, much in Precambrian age. It is widely distributed throughout the continental crust of the Earth and is the most abundant basement rock. It underlies the relatively thin sedimentary rock veneer of the continents.