



METAMORPHIC ROCK

Metamorphism means to change in structure, appearance, and composition. A rock that changes in its solid state within the earth's crust is called metamorphic rock. The rock changes because of change in temperature, pressure, and/or chemical interactions. In nature, great pressure on rocks causes the temperature to rise. Together, the heat and pressure changes produce metamorphic rock.

Metamorphic rocks begin as an igneous or sedimentary rock. Metamorphic rock does not melt, like igneous rock. These are actually baked by the earth's internal heat causing the structure to change altogether. Rocks may begin to change even at very shallow depths. Much of the world's metamorphic rock was formed billions of years ago when the earth was much hotter and there was much more tectonic activity, or land movement, causing great pressure on rocks.

Rocks are combinations of various minerals that have been formed by heat or pressure in the earth. These larger combinations determine how our planet's crust looks and behaves. Using her or his knowledge of how rocks are formed can give a geologist a good idea of what that part of the earth was like in earlier times.

There are three groups of rocks—igneous, sedimentary, and metamorphic. Each of these grouping includes different varieties of rocks that were created in very different ways.