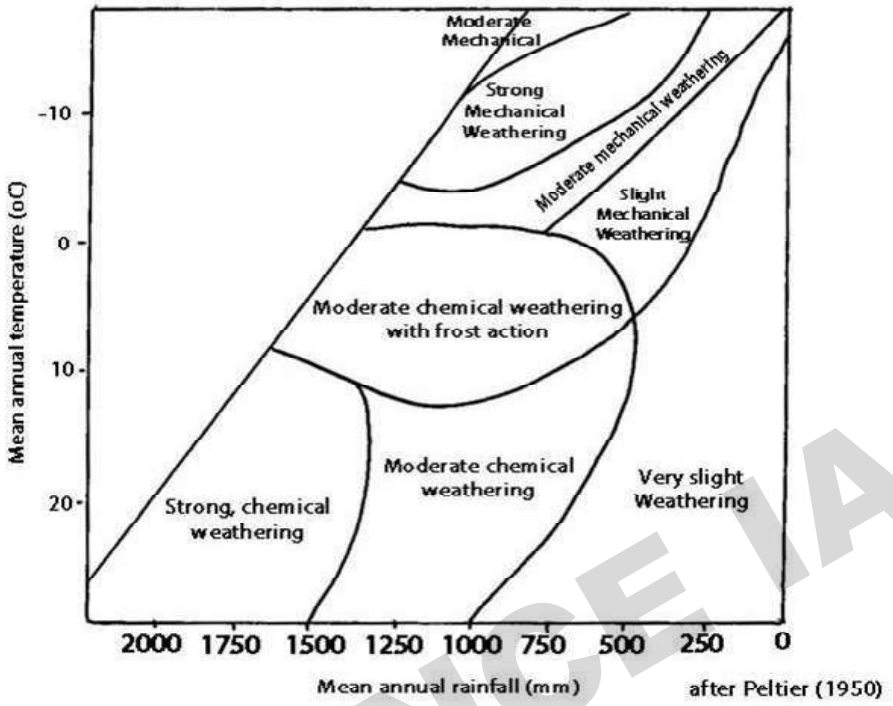
The process is referred to as oxidation. It leads to loss of electrons. Oxidation is important in decomposing Fe rich minerals such as olivine, pyroxene and Hornblende. Oxidation can only occur when Fe is freed from silicate mineral by the process of hydrolysis. Thus, for oxidation to progress high water availability is a primary pre- condition as water availability leads to process of hydrolysis.



Thus, water behaves as a catalyst for the process of oxidation.

c) Hydrolysis: The most common mineral group i.e., silicates are decomposed primarily by the process of hydrolysis. It is a type of solution whereby any substance react with water. Hydrolysis can occur in pure water, but in nature, water becomes slightly acidic which greatly accelerates the hydrolysis process.

Potassium feldspar + carbonic acid + $H_2O \rightarrow$ Kaolinite clay + potassium + silica + Bicarbonate ions.

Clay minerals are the most abundant products of potassium feldspar.

In the process of weathering of granite through hydrolysis quartz crystal becomes free and may accumulate as dunes, beaches or other sandy decomposition.

Through the process of chemical weathering unstable minerals are converted to stable minerals.

Original Minerals:	It weathers to produce:
Quartz	Quartz grains
Feldspar	Clay minerals
Olivine	Hematite

Chemical weathering can also result from biological processes. One common process is chelation (podsolization.)