Lithification: this is the process in which sediments compact under pressure, expel cognate fluids, and gradually become solid rock

Cementation: adding new materials and ions in the pore spaces between existing grains

Compaction:particles of sediments that are cemented by clay, calcite, and silica due to over boarding pressure where water flows

Examples of diagenesis: (1) chemical alteration of feldspar to form a distinct new mineral which is clay

(2) chemical alteration of marble used for countertops in workshops In kitchens and bathrooms