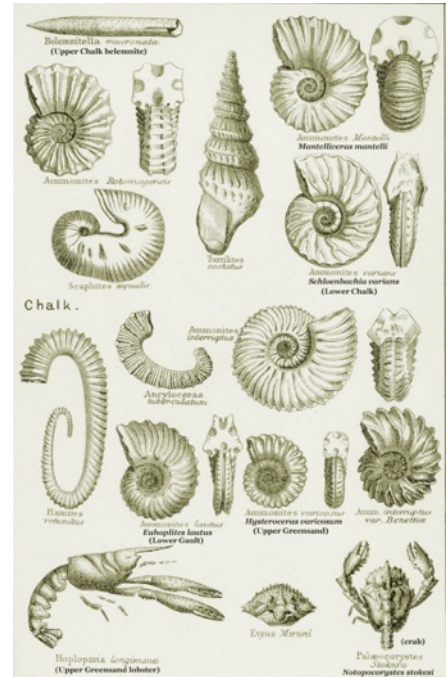
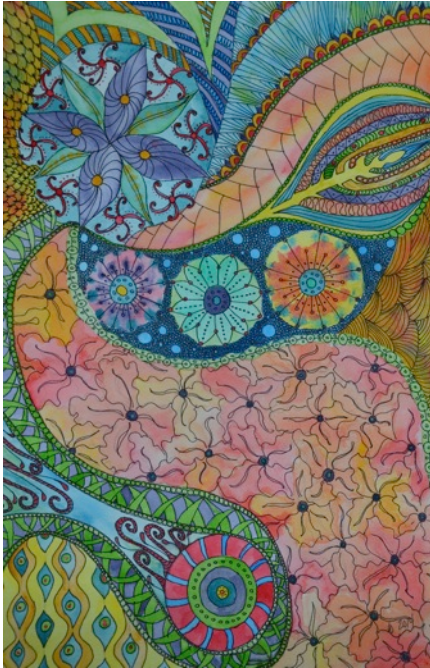


# Fossils



The term 'fossilization' refers to a variety of often complex processes that enable the preservation of organic remains within the geological record. It frequently includes the following conditions: rapid and permanent burial/entombment - protecting the specimen from environmental or biological disturbance; oxygen deprivation - limiting the extent of decay and also biological activity/scavenging; continued sediment accumulation as opposed to an eroding surface - ensuring the organism remains buried in the long-term; and the absence of excessive heating or compression which might otherwise destroy it.

Fossil evidence is typically preserved within sediments deposited beneath water, partly because the conditions outlined above occur more frequently in these environments, and also because the majority of the Earth's surface is covered by water (70%+). Even fossils derived from land, including dinosaur bones and organisms preserved within amber (fossilized tree resin) were ultimately preserved in sediments deposited beneath water i.e. in wetlands, lakes, rivers, estuaries or swept out to sea.

Fossilization can also occur on land, albeit to a far lesser extent, and includes (for example) specimens that have undergone mummification in the sterile atmosphere of a cave or desert. However in reality these examples are only a delay to decomposition rather than a lasting mode of fossilization and specimens require permanent storage in a climate controlled environment in order to limit its affects.

