verifica la comprensione

Leggi il brano e rispondi alle domande.

Sedimentary rock and fossils

Sedimentary rocks are produced by the weathering of preexisting rocks and the subsequent transportation and deposition of the weathering products. Weathering refers to the various processes of physical disintegration and chemical decomposition that occur when rocks at the Earth's surface are exposed to the atmosphere (mainly in the form of rainfall) and the hydrosphere. These processes produce soil, unconsolidated rock detritus, and components dissolved in groundwater and runoff.

Erosion is the process by which weathering products are transported away from the weathering site, either as solid material or as dissolved components, eventually to be deposited as sediment. Any unconsolidated deposit of solid weathered material constitutes sediment. It can form as the result of deposition of grains from moving bodies of water or wind, from the melting of glacial ice, and from the downslope slumping (sliding) of rock and soil masses in response to gravity, as well as by precipitation of the dissolved products of weathering under the conditions of low temperature and pressu re that prevail at or near the surface of the Earth.

Sedimentary rocks may contain fossil. The content fossil is a useful guide to the depositional environment of sandstones. Desert sandstones usually lack fossils. River-channel and deltaic sandstones may contain fossil wood, plant fragments, fossil footprints, or vertebrate remains. Beach and shallow marine sands contain mollusks, arthropods, crinoids, and other marine creatures, though marine sandstones are much less fossiliferous than marine limestones. Deepwater sands are frequently devoid of skeletal fossils, although tracks and trails may be common. The fossils are not actually structures, of course, but the living organisms were able to produce them. Burrowing by organisms, for example, may cause small-scale structures, such as eyes and pods or tubules of sand.

(http://britannia.com)

a) What does occur when rocks at the Earth's surface are exposed to the atmosphere and the hydrosphere?
b) What does the term erosion mean?
c) Why the content of fossils is a useful guide to identify the depositional environment of sandstones?