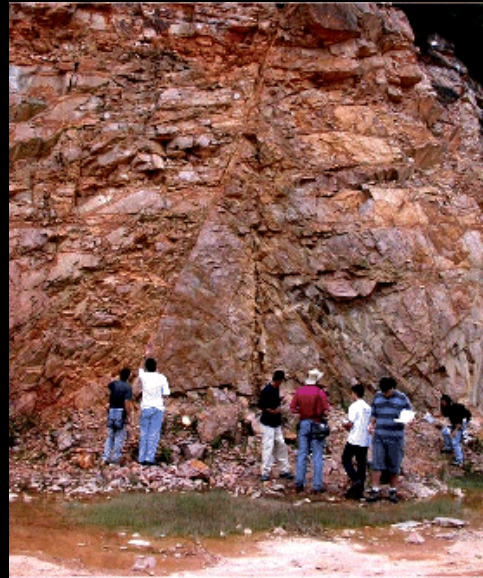


For more than 2500 years Man has been concerned with the knowledge of the Earth and the Universe. The first "scientists" studied all areas of knowledge: mathematics, astronomy, philosophy, zoology, botany, etc.

Over time, new sciences have been dedicated to new areas of knowledge.

About 300 years ago PALEONTOLOGY was created, as the branch of GEOLOGY that studies the living beings and the environments in which they lived throughout the history of the Earth.

GEOLOGY: science that studies the Earth and the phenomena that occur in it.



PALEONTOLOGY:
science that studies
the fossils.



PALEONTOLOGISTS:
scientists who study
fossils.

WHAT ALLOWS TO RECONSTITUTE THE HISTORY OF THE EARTH?

Rocks



Pico de Ana Ferreira
Porto Santo



Praia da Adraga - Sintra

Fossils



Moluscos bivalves, Sintra



Dobra

Deformations (folds and faults)

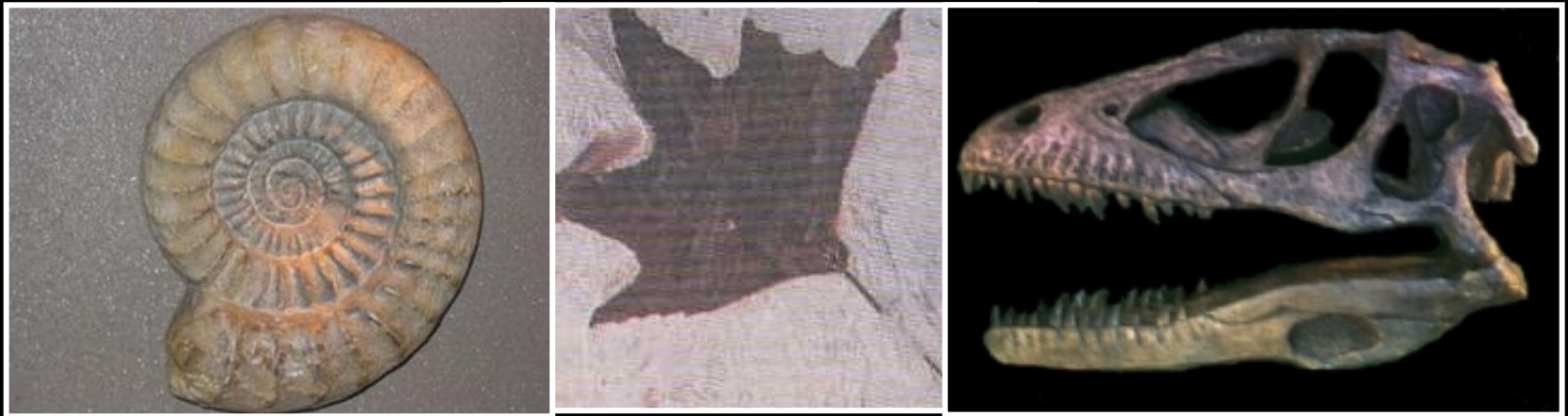


Falha



WHAT ARE FOSSILS?

Organisms or remains of organisms or traces of their activity that have been preserved, usually on rocks.



The FOSSILS allow us to know the transformations that have occurred on Earth and its history.

TYPES OF FOSSILS

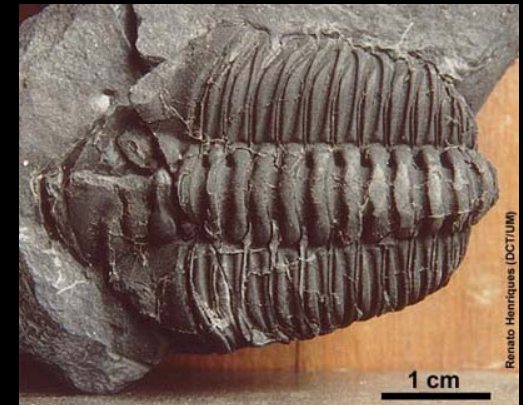
Somatofossil: somatic remains (that is, of the body) of organisms from the past. For example, fossils of teeth, shells, leaves, logs...



Concha de vieira (*Pecten*), Miocénico, Algarve



Gastrópode, Jurássico Superior, Cabo Espichel



Trilobite (*Dalmanites socialis*), Ordovícico, Buçaco



Fóssil de peixe, esqueleto (*Sarmatian*)

TYPES OF FOSSILS

Ichnofossil: organisms activity biological vestiges from the past. For example, fossils of footprints, bite marks, eggs (eggshells), excrement (coprolytes), tunnels and dwelling galleries...



Ichnofossil de pegada de dinossauro carnívoro (Terópode). Jurássico, Serra de Aire



Trilho de Trilobite , Paleozoicos, Penha Garcia



Coprólito de dinossauro

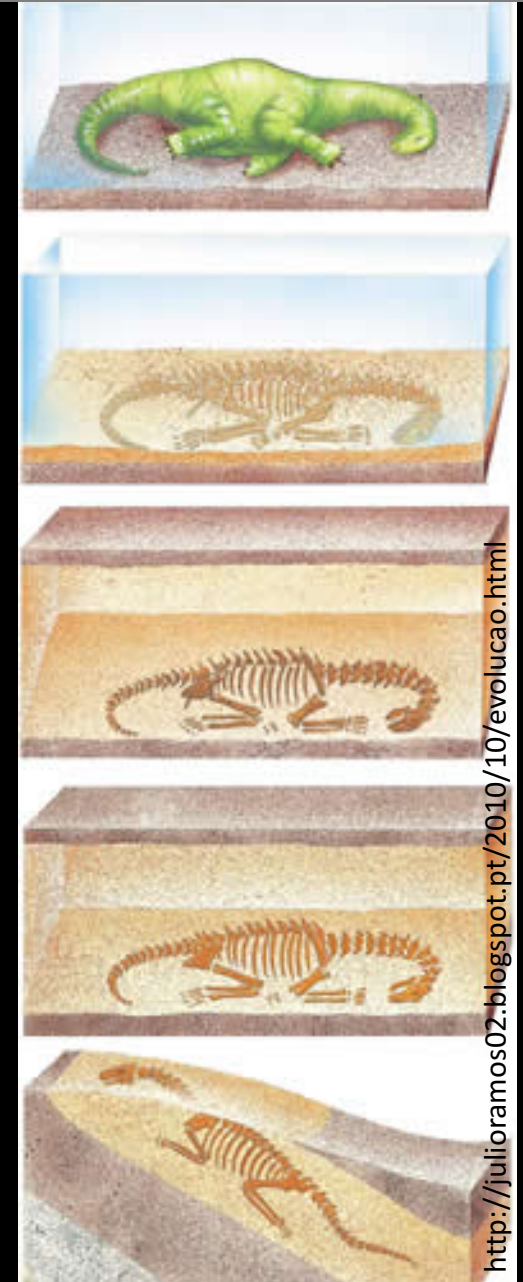


Ovo de dinossauro, Patagónia

Of all the living organisms that existed on Earth in the past, only a small part was preserved in the form of fossils

What is Fossilization?

Set of physical and chemical phenomena that allow the formation of a fossil.



Fossilization is a very rare phenomenon, since in nature the organisms after death rapidly decay.

Let's do a fossilization atelier...

