

## **Lesson 1**

**Fossils** are preserved remains or traces of living things

organisms die and are buried by sediment which hardens and turns to rock

most form near water such as swamps, lakes, or shallow seas where sediment builds up

Soft parts of organisms quickly decay or are eaten by other animals- usually only the hard parts (skeletons, teeth, wood, shells) are preserved

## Types of Fossils

Molds and Casts- can preserve fine details

mold- hollow shape of an organism

cast- solid copy of the shape of the organism

Petrified Fossils - turned into stone, water carrying minerals seep into the pores of an organism the water evaporates and leaves the minerals

Carbon Film - extremely thin coating of carbon on rock can preserve delicate parts of an organism

gases in sediment escape leaving carbon behind

Trace Fossils- footprints, trails, and burrows become buried by sediment and fossilized (evidence of activities of an organism)

Preserved Remains- organisms become trapped in tar or tree resin which hardens into amber or organisms freeze in ice / remains are preserved.

Fossil Record- (scientists study this to learn) information about past life that many paleontologists have collected -

Scientist who studies fossils

- gives us information about the history of life, past environments and how organisms have changed over time (evolution) - the gradual change in living things over long periods of time
- can use the fossil record to reconstruct extinct animals - an animal is extinct if it no longer exists and will never live on earth again.