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Fossils are evidence or past life preserved within sedimentary rocks. There are two main categories of fossils, body fossils and trace fossils. Body fossils contain actual body parts of ancient living organisms, such as shells, bones, leaves, roots, bark, teeth, tusks, etc. Trace fossils are indirect evidence of past life such as fossil feces (called coprolites), burrows, footprints, and tracks. All of the fossils that you will look at today are body fossils. The fossils that you will look at are tens or hundreds of millions of years old. They died a very long time ago. You will work in groups of 3 or 4.

First watch the following youtube video narrated by Bill Nye the Science Guy.

<https://www.youtube.com/watch?v=YUv6G95LWJw>

The green box in front of you contains 24 fossils (<https://www.wardsci.com/store/catalog/product.jsp?catalog_number=500125>). You are also provided with four magnifying glasses, four pencils and a fossil identification book. Your kit contains the following types of fossils Protozoa (1), Porifera (sponge) (1), Cnidaria (corals)(2), Bryozoa (sea mat) (1), Brachiopoda (lamp shells) (2), Scaphopoda (1), Pelecypoda (clams, oysters)(3), Gastropoda (snails) (2), Cephalopoda(3), Trilobita (1), Echinodermata (3), Graptoloidea (1), Chordata (2), Plant(1). Read about each of these types of fossils, paying careful attention to photographs, drawings and descriptions to complete this lab. Your samples are labeled from 1 to 24. Line the fossils up in 2 long rows. If you are a group of three, each student will work with 8 fossils. If you are a group of four, each student will work with 6 fossils.

Draw a detailed picture of each fossil. Use the included fossil identification book and/or the internet to Identify each fossil. For each fossil, determine its mode of life, specifically this means determine whether it was terrestial (lived on land), planktonic (floated in seawater), benthic (lived on the seafloor) or nektonic (swam in the ocean) Write your answers on the provided answer sheets.

After each student in the group has identified their fossils, use the remaining time by having each student explain to the others in the group how they identified their fossils. Encourage each student to share any additional information that they have gathered. For example, is it an animal or plant? Did the creature float, swim, or did it live on the ocean bottom? Did it live in the ocean?

After discussing your results with your fellow group members, hand your answer sheets in to your teacher. He/she will grade them, and hand them back to you next week.