

## Fossil Identification Activity

Team Member's Names: (Each Name is in a different font Color)

**Fossils** are the remains, imprints, or traces of organisms that once lived and are now preserved in the Earth's rock record. Understanding fossils can help scientists gain insights about the relative time in which the organism lived and what type of environment they lived in. Most traces of organisms do not survive. Discuss the following questions with your group and write down some of the thoughts or ideas you might have.

1. What could be some reasons why most evidence of prehistoric organisms don't survive?
2. In order to become a fossil, what do you think must happen to the organism quickly? Depend your answer.
3. What parts of an organism do you think have the best chance of becoming fossilized? Why?
4. In what type of rock would you most likely find a fossil? Igneous? Metamorphic? Sedimentary?

There are five main types of fossils. To learn more about them, go to the following website and then fill out the table.

<http://earthscience.xyz/GeologicHistory>

<i>Fossil Type</i>	<i>Description</i>	<i>Real Picture Example</i>
<b>Cast and Molds</b>		
<b>Permineralization and Replacement</b>		
<b>Carbonization</b>		
<b>Unmineralized Remains</b>		
<b>Trace Fossils</b>		

5. What is the difference between a cast and a mold?

Your team will be given 8 fossils. Be careful as some of them are very small and brittle. Your job is to do your best to identify your fossils and find information about them.

Fill out the following table.

a. Hints:

- i. Use the shared document called [Fossil Book](#).
- ii. Use the website: [Fossil ID](#)
- iii. Use this document: [SAFossils Website](#)
- i. Use the FossilGuy Fossil Sheets: [Fossil Sheets Page](#)

Fossil Number	Name or names of fossils. (Phylum, class, order, Genus, Species)	In which time period did it live. Years and/or Period.	In what type of environment would it have lived?	How would it have moved if it moved?	What would it have eaten?	What type of fossil is it. (Permineralized/ Replacement, trace, carbonaceous, mold, cast)	Picture of what it might have looked like or an actual fossil image.

6. Discuss with your team, why paleontologists (somebody who studies prehistoric life) do what they do? Why study fossils? For what purpose? Write down some of the reasons you came up with.