Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Worksheet Group 3** Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fossils 101

Fossils are echoes of an ancient past. Find out about the two major categories of fossils, how fossilization occurs, and how fossils can help paint a picture of the planet's history.

Like buried treasure, they lie hidden from sight. Echoes of an ancient past, they whisper secrets and tell tales once lost to time.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are remnants or impressions of ancient organisms that are naturally preserved in stone.

While there are hundreds of fossil types, they are often grouped into two major categories:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which are the preserved remains of plants and animals;

and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which are records of an animal’s behavior, such as footprints.

Together, they form the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, a primary account that tells the story of life on Earth through stone.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or the process of preserving organisms in stone, can occur in countless ways.

Among many methods, this group includes organisms that have been frozen, preserved in tar pits, and mummified.

One special case involves trapping organisms – oftentimes, insects – in amber.



Other fossilization methods change the specimen as it is being preserved.

For instance, carbonization transforms soft tissues into thin, black films of carbon. In fact, countless layers of carbonized plant material create a well-known fossil fuel: coal.



But one of the most common types of fossilization that changes a specimen is called “permineralization”.



When conditions are right, fossilization can preserve crucial information about an organism. Describe why fossils are important for scientist to understand the present world.

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