## Science Foundation ANCIENT ANIMAL PUZZLE

3-7

## How do fossils form?

Fossils are traces of ancient plants and animals. Some fossils are remains and include bones, teeth, and shells. Other fossils are imprints of plants or even footprints.







Fossils form in different ways. For animals with backbones, the process that creates fossilized bones starts when the plant or animal dies. Soft tissues break down and leave only bones behind. Over time, the bones become buried. As layers of earth build up, they compress the layers below. As the layers and bones compress, they turn into rock.





Not every plant or animal can become a fossil. Only organisms that were buried quickly become fossilized. Burial happens faster in the ocean than it does on land. Marine organisms that lived in the ocean were more commonly fossilized. Plants and animals that lived on land were less likely to be fossilized.

## What can we learn from fossils?

We can learn a lot about ancient plants and animals by studying their fossil remains. Scientists can figure out what an animal looked like by looking at its fossil. We also use fossils to figure out where an animal lived or what it ate.

Scientists can also compare ancient animals to ones on Earth today. The species we see today evolved from ancient species. These comparisons can help us piece together the evolutionary puzzle.

Name: Diplodocus Location: North America Time: Jurassic Period

Long tail may have been used for defense or to balance their long neck \

Long neck may have allowed them to reach food that is out of reach to shorter dinosaurs

teeth
allowed it
to eat special
types of food

Unique

Long, strong legs supported the animal on land

Icons courtesy of The Noun Project



## **Fossil Laboratory**

Use this space to arrange your fossil pieces. Glue or tape them down once you are done. Look online to see if you can figure out the animal's name and to learn more about it.



Animal name: \_\_\_\_\_



You have discovered a fossil bed where the bones of some ancient animal were preserved. But wait! It looks like the fossil bones have moved out of place over time.





Remove the fossils from the fossil bed by cutting them out. Bring the fossils back to the laboratory and try to fit them together to see what animal you have discovered.

