My Reading Notes

These pages were taken from the G4 Journal "Fossils and Sedimentary Rocks."

Earth has a story to tell

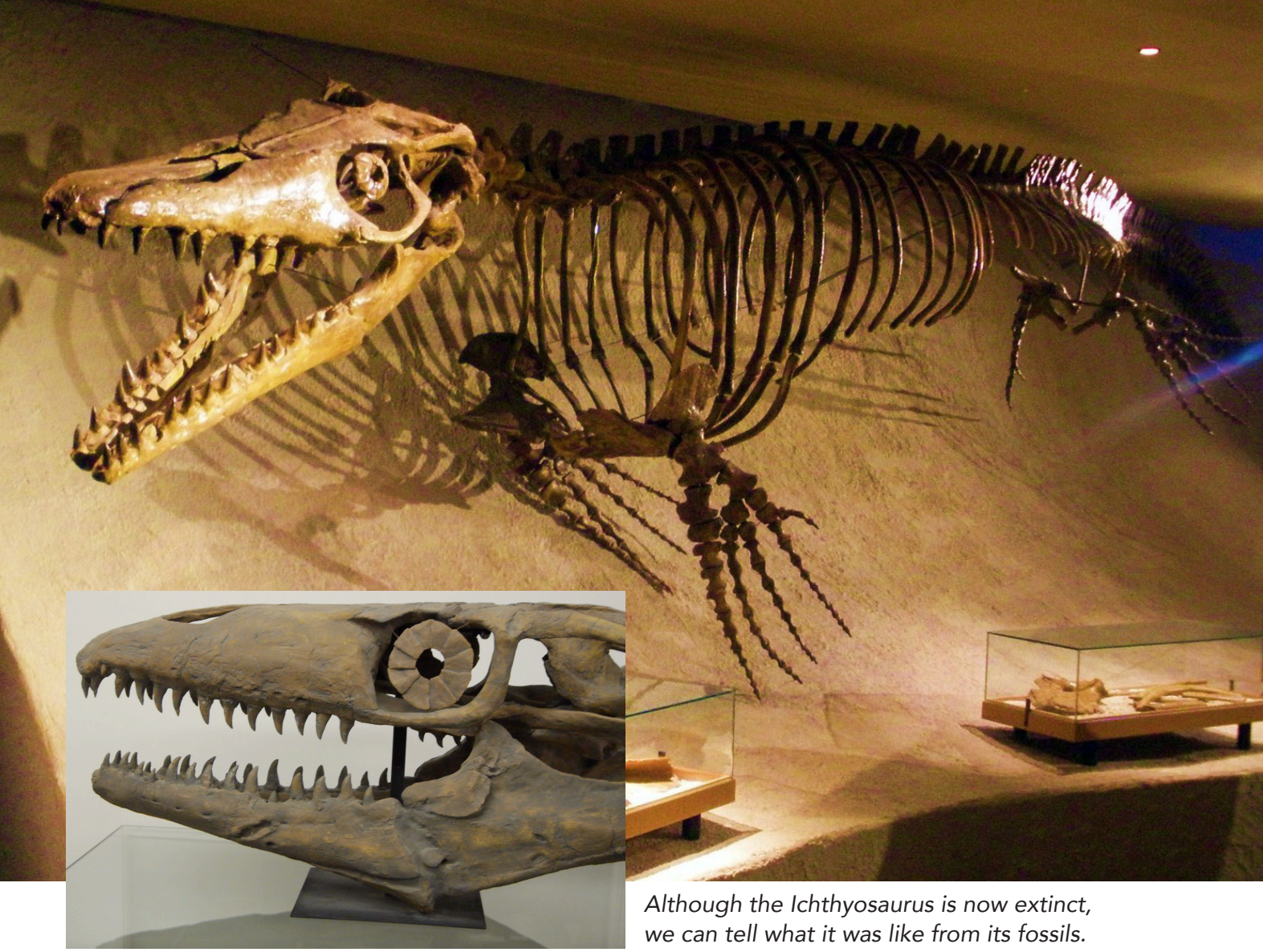
Have you ever wondered what it would be like to walk with the dinosaurs? Wouldn't it be fascinating to be transported back in time to see and study the amazing creatures that walked on Earth millions of years ago? If you are fascinated by Earth's past, you have a lot in common with earth scientists and paleontologists. They study fossils and sedimentary rocks to piece together the amazing story of our Earth's history.

What can you tell about this ancient creature from this fossilized skeleton?

Think, Pair, Share!

New Words

Paleontologists search for bones that have stayed hidden for millions of years. The fossilized bones of this T-Rex skeleton show us what life was like on Earth long ago.



Although the Ichthyosaurus is now extinct, we can tell what it was like from its fossils.

Buried sediments become rock

As wind blows, rain falls, and rivers flow to the oceans, large amounts of sediments from higher ground can bury existing ground and sea floor surfaces deep beneath mud, sand and silt. After millions of years, layers of sediments can accumulate that are hundreds or even thousands of feet thick.

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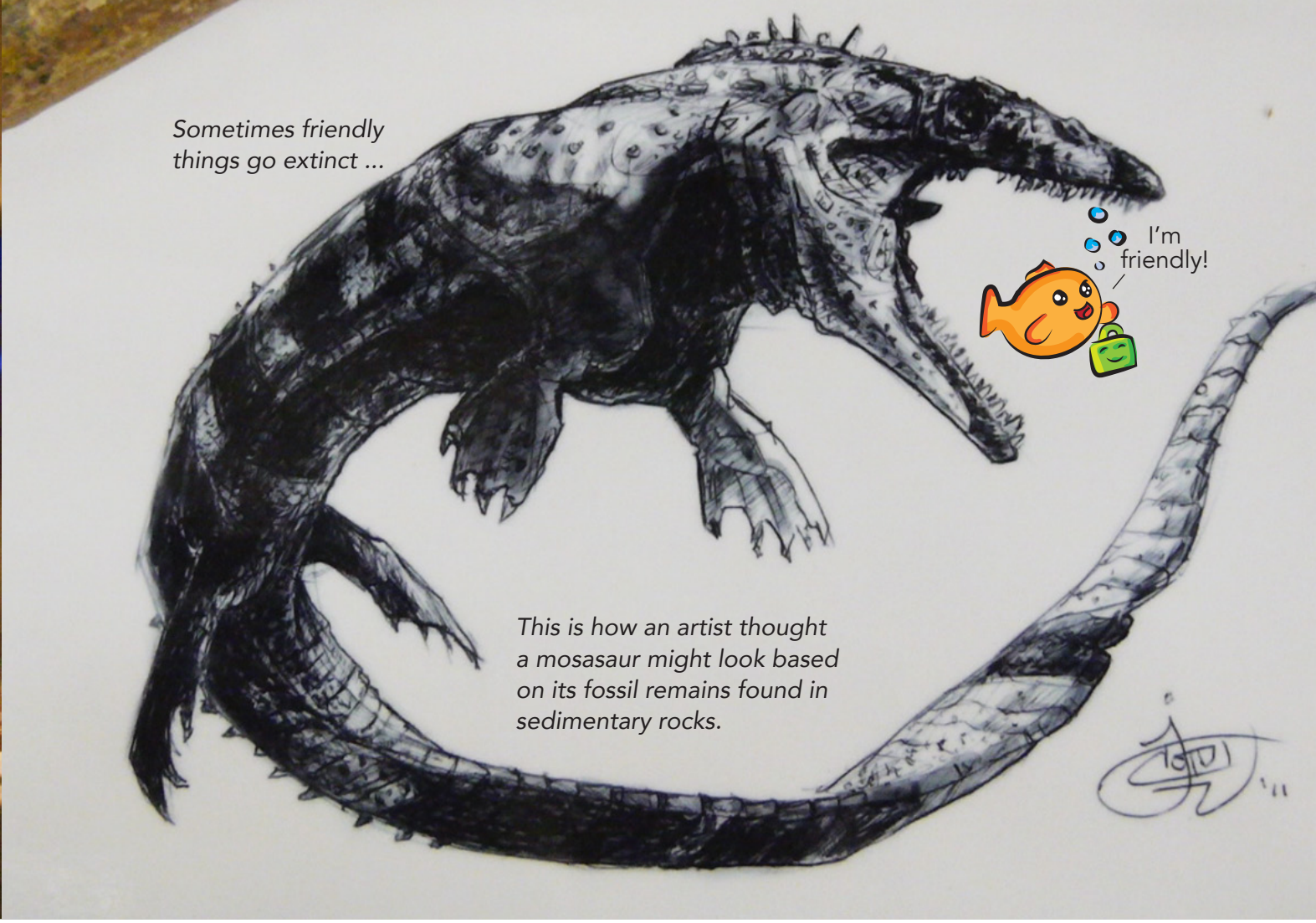

Buried sediments harden into rock over time. We call this type of rock **sedimentary rock**. After even more time, ground movement and erosion can cause layers buried deep within Earth to become exposed at the surface again. Studying these ancient layers of sedimentary rock allows us to discover ancient species that lived long ago and are now extinct, such as the Ichthyosaurus.

Nature leaves patterns in sediments

Today, you can observe interesting patterns in sediments such as sand and mud. If you explore a desert you might find beautiful patterns of ripples left by wind on the surface of sand. Cracks commonly form in mud when puddles dry up. You can tell what type of animal walked across the sand and mud by the tracks that it leaves behind.

Match the patterns in sediments today to the fossilized patterns found on sedimentary rocks that are millions of years old.

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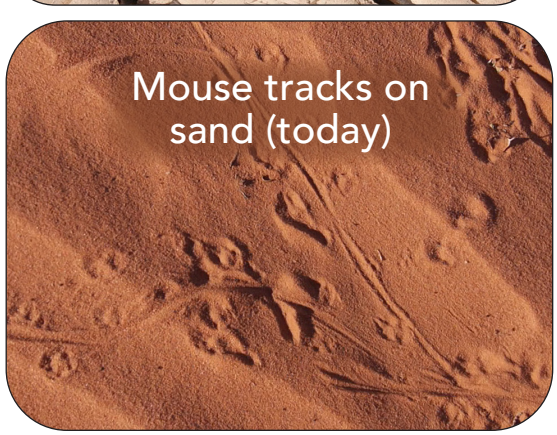

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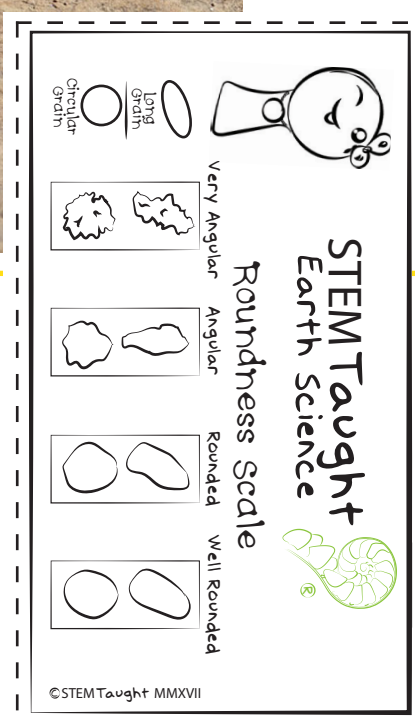
Nature leaves fossilized patterns in rocks

Bones aren't the only thing that can become fossilized. Patterns and imprints left in sediments can be preserved for millions of years when they are buried and compacted under layers of sediment. Eventually the loose sediments become solid rock and the patterns left by the ancient environment become preserved for us to find and observe today. We can know what it was like in prehistoric times by comparing sediment feature that we see today with features found preserved in sedimentary rocks.

This dinosaur footprint was made in soft mud millions of years ago. It is now preserved in solid rock.



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