Name _____

What Stories Can Layers of Rock Tell Us About Earth's Past?

Rocks may look quiet and still, but they are full of stories. Scientists who study rocks are called geologists. These experts know that different layers of rock can teach us about Earth's history. Like pages in a book, each layer has something to say.

When new layers of rock form, they usually stack on top of older ones. Over millions of years, dirt, sand, and other materials pile up. These layers harden into rock. The oldest layers are found at the bottom, and the youngest ones are at the top. This helps scientists figure out what happened a long time ago.

Sometimes, layers contain fossils—remains of plants and animals that lived long ago. If a layer has dinosaur bones, for example, it shows that dinosaurs lived in that area at that time. A layer with seashells in a dry desert tells us that water once covered the land.

The color and type of rock in each layer can also give clues. A reddish layer might mean the area was once hot and dry. A layer made of black, sticky rock called coal might show that a forest used to grow there.

Earth doesn't always stay the same. Volcanoes erupt, rivers change course, and mountains rise. These events leave marks in the rock layers. Sometimes, the layers are bent or broken. This tells scientists that something powerful happened, like an earthquake.

Geologists dig carefully and read the layers like a storybook. They look for patterns and ask questions. What animals lived here? Was this place once underwater? What kind of climate did it have?

By studying rock layers, scientists learn about ancient life, past climates, and how Earth has changed over time. Even though the rocks don't speak, they hold important stories waiting to be uncovered.