



Geoscientists study... LIFE

Earth is the only planet in our solar system with lots of liquid water. Because Earth is wet, it also has life. For billions of years, Earth systems have interacted to produce and continually change the variety of plants, animals, and other forms of life. Remember the dinosaurs? After living on Earth for almost 200,000,000 years they became extinct because an asteroid hit Earth around 65,000,000 years ago. However, plants and animals also interact harmoniously with Earth systems. An example is the way many marine animals such as clams extract calcium carbonate, dissolved in the ocean, to build their shells.



Some geoscientists examine the interactions between life and the other components of the Earth system (rocks, water, air, space). Others study the chemical reactions between life and these systems. In search of evidence, they wade through wetlands, dive in submersibles to deep ocean vents, drill into soil and rocks, and launch balloons into the atmosphere. They work to help protect our environment and our health as they track pollutants that can go through soil, water, and air. What do we call these geoscientists?

Biogeoscientists or Biogeochemists

Some geoscientists explore the development of life in extreme environments, such as the boiling pools near geysers, and the permafrost of the Arctic. Then they apply what they learn to the growing knowledge about the environments of other planets. Is there extraterrestrial life within our solar system or beyond? You could be part of a team that discovers some answers to this very big question. What do we call these geoscientists?
Astrobiologists



Some geoscientists examine fossil records to understand past climate changes and then apply this knowledge to current or possible future climate changes. They are on the cutting edge of science, so stay tuned for the startling new knowledge about the interaction of life, Earth, and space that they will discover! What do we call these geoscientists? **Paleobiologists**