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If we intend to live on—and with—this planet, we truly need to understand how it works, and to understand the interactions of the many components that make up the Earth. The Earth sciences provide an integrated and interdisciplinary approach to a true understanding of our planet. Earth science includes and applies knowledge from biology, chemistry, physics, ecology, and mathematics to tackle complex interdisciplinary issues.

Earth science education also improves critical thinking skills. It offers a historical perspective and improves our ability to predict future events. To understand Earth processes that affect us now and tomorrow, geoscientists look for evidence of what happened in the past. This connects students to the past, as well as challenging them to think about the future.

Earth science poses questions that are exciting as well as practical to children and adults alike: Why is California prone to Earthquakes? Why is the beach eroding and what can we do about it? Why isn't a floodplain a good place to build a house? Where will we get the fuel to power our cars and planes in the future? Where will we get fresh water to drink? How can I help to protect the environment? Earth science problems and issues are ideally suited for an inquiry-based education approach— an educational process that most closely resembles the reality of scientific endeavor.