Studying Earth Science

Branches of Earth Science

Earth Science Study Guide

Geology

In **Geology**, scientists study the Earth's solid material and structures and the processes that create them. Topics studied within geology include the study of the composition of rocks, the study of landscapes and how they were formed, and how natural material can be used as resources.

Study Tip

The different types of Earth Science can be remembered by the phrase **G**o **A**nd **C**all **M**y **E**lephant **O**ver, which stands for Geology, Astronomy, Climatology, Meteorology, Environmental Science, and Oceanography.

Oceanography

Oceanography is the study of everything in the ocean. Scientists use probes to explore the deeper parts of the ocean, and marine geologists focus on the rocks and geologic processes in ocean basins. Even with new technology, much of the ocean, which covers 70% of the Earth's surface, remains unexplored.

Meteorology

Meteorology is the study of weather, and includes weather patterns, clouds, hurricanes, and tornadoes. The use of new technology such as radars and satellites has helped meteorologists to become more accurate at forecasting the weather.

Environmental Science

Environmental science is the study of the effects people have on their environment. This includes the landscape, atmosphere, water, and living things. **Climatology**, the study of the whole atmosphere, is a part of environmental science and helps people to understand how and why climates change.

Astronomy

Astronomy is the study of outer space, and everything in it. Astronomers use telescopes to see beyond what the human eye can see, and help design spacecraft and satellites that go into space and bring back information.

Concept Check

- Be able to define astronomy, geology, climatology, environmental science, meteorology and oceanography.
- Be able to identity these different types of earth science based on examples of methods used/things studied within one of the categories.