

Sea Floor and Continental Drift

Concepts Related to the California Science Standards

Grade Six:

Plate Tectonics and Earth's Structure

1. Plate tectonics accounts for important features of Earth's surface and major geologic events.
2. Topography is reshaped by the weathering of rock and soil and by the transportation and deposition of sediment.

Grade Seven:

Earth and Life History (Earth Science)

4. Evidence from rocks allows us to understand the evolution of life on Earth. As a basis for understanding this concept: f. *Students know* how movements of Earth's continental and oceanic plates through time, with associated changes in climate and geographic connections, have affected the past and present distribution of organisms.

Grades Nine through Twelve: Earth Science

Dynamic Earth Processes

3. Plate tectonics operating over geologic time has changed the patterns of land, sea, and mountains on Earth's surface.

All Grades:

Investigation and Experimentation

Record data by using appropriate graphic representations (including charts, graphs, and labeled diagrams) and make inferences based on those data.

Draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.

Write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.

Concepts Related to the National Science Standards

- 1- The floor of the ocean is composed of hills, plains, ridges, trenches and seamounts.
- 2- Oceanographers have developed methods for mapping the ocean floor, illustrating what cannot be seen.
- 3- Geologists and oceanographers use maps of the sea floor as tools for research and applied science (technology).
- 4- land masses on Earth are slowly changing shape as a result of moving for millions of year.
- 5- Continual convection currents move the earth's crust, resulting in the formation of islands and deep oceanic trenches.
- 6- Core drilling has produced information regarding the movement and density of the oceanic and continental crust.