

Gottesman Hall of Planet Earth

BACKGROUND FOR EDUCATORS

Overview of Student Worksheets

Using [worksheets](#), students visit three areas in the hall to observe interactions of Earth's spheres, read maps of Earth's features, and analyze diagrams of large-scale plate tectonics. .

These observations help students experience a **natural phenomenon**: the landform features of Earth—on continents and the ocean floor—occur in observable patterns. This phenomenon can serve to anchor discovery and discussion as the students explore the **investigation questions**: How do plate tectonics shape Earth's surface and create the landform features of our planet?

Extension Ideas

Back in the classroom, students research a specific feature of Earth (for example: the Marianas Trench, the San Andreas Fault, Yellowstone, or the Hawaiian Islands) and create maps and diagrams that illustrate the geosphere interactions that formed those features.

Suggested resources:

- Reading: [Earth's Dynamic Machine](#) (amnh.org/planet-earth-educators)
- Online interactive: [Plates on the Move](#) (amnh.org/explore/ology/earth/plates-on-the-move2)

Correlation to Standards

This activity supports the following Next Generation Science Standards:

Disciplinary Core Ideas	ESS2.B: Plate Tectonics and Large-Scale System Interactions The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the different land and water features areas of Earth.
Crosscutting Concepts	Patterns Patterns can be used as evidence to support an explanation.
Science and Engineering Practices	Analyzing and Interpreting Data Analyze and interpret data to make sense of phenomena using logical reasoning.