

Tectonics Objectives

Correctly define: Asthenosphere, convergent, divergent, epicenter, focus, strata, p-waves, s-waves, tectonics, tsunami

Explain that most earthquakes and volcanoes are located at or near plate boundaries.

EARTHQUAKES:

Demonstrate how to find the epicenter of an earthquake based on data from three seismographs.

Calculate the difference in arrival times between p- and s-waves.

Calculate the distance from the epicenter of an earthquake based on the arrival times of p- and s-waves.

Calculate the distance from the epicenter of an earthquake based on the difference in arrival time of p- and s-waves.

Explain how Earth's interior properties can be inferred from seismic data.

Explain how damage could be minimized in the event of an earthquake.

Explain the concept of the Richter scale.

PLATE TECTONICS:

Explain the difference between plate tectonics and continental drift.

Give three observations which support continental drift.

Identify that oceanic crust is thinner and denser than continental crust.

Identify the key rock types that compose the oceanic and continental crusts.

Name the three types of plate boundaries and give an example for each.

Explain the relative age of oceanic crust in relation to its distance from a rift.

Identify that convection cells and radioactive decay are the driving forces behind plate movement.