

Determining Earth's Layered Interior

A Three-Dimensional Earth Science Investigation for Middle and High School Students



Download the complete activity at
<https://www.iris.edu/hq/inclass/lesson/16>



BUILD a model of a homogeneous Earth and
PREDICT its impact on seismic waves from recent earthquakes

ENGAGE in the process of science by comparing modeled data to observations

EXAMINE seismic evidence to **DISCOVER** that Earth cannot have a homogeneous composition

CONCLUDE that Earth must have a layered internal structure

During this NGSS-aligned activity, the class will participate in three-dimensional learning by:

- ▶ Selecting data from a recent earthquake using the IRIS Global Seismogram Viewer (<http://ds.iris.edu/gsv>) or using data in the lesson
- ▶ Working in teams to develop models
- ▶ Generating a pattern of evidence to argue for/against the presence of a layered Earth
- ▶ Determining and measuring the size of the Earth's outer core

