

## **Congruence with the NGSS**

### Unit Title: Journey to the Center of the Earth

#### Science and Engineering Practices (SEPs)

SEPS	Activities
Asking Questions and Defining Problems	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Why is the Earth Still Hot Inside?</li> <li>How Do We Know What's Inside Earth?</li> <li>Annenberg Learner: Dynamic Earth</li> </ul>
Developing and Using Models	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Annenberg Learner: Dynamic Earth</li> </ul>
Planning and Carrying Out Investigations	<ul><li>Why is the Earth Still Hot Inside?</li><li>Determining and Measuring Earth's Layered Interior</li></ul>
Analyzing and Interpreting Data	<ul> <li>Why is the Earth Still Hot Inside?</li> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> <li>Hotspot Theory and Plate Velocities</li> </ul>
Using Mathematics and Computational Thinking	<ul> <li>Why is the Earth Still Hot Inside?</li> <li>Determining and Measuring Earth's Layered Interior</li> <li>Hotspot Theory and Plate Velocities</li> </ul>
Constructing Explanations and Designing Solutions	How Do We Know What's Inside Earth?
Engaging in Argument from Evidence	<ul> <li>Why is the Earth Still Hot Inside?</li> <li>Hotspot Theory and Plate Velocities</li> <li>Determining and Measuring Earth's Layered Interior</li> </ul>
Obtaining, Evaluating and Communicating Information	<ul> <li>Layers of the Earth</li> <li>Annenberg Learner: Dynamic Earth</li> </ul>
Scientific Knowledge is based on Empirical Evidence	<ul> <li>Why is the Earth Still Hot Inside?</li> <li>Hotspot Theory and Plate Velocities</li> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> <li>Hotspot Theory and Plate Velocities</li> </ul>



## Disciplinary Core Ideas (DCIs)

DCIs	Activities
ESS3B: Natural Hazards	Measuring Earth's Vital Magnetic Field

# Cross Cutting Concepts (CCCs)

CCCs	Activities
Patterns	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> <li>Measuring Earth's Vital Magnetic Field</li> <li>Annenberg Learner: Dynamic Earth</li> </ul>
Cause and Effect	<ul> <li>Why is the Earth Still Hot Inside?</li> <li>Hotspot Theory and Plate Velocities</li> <li>Determining and Measuring Earth's Layered Interior</li> </ul>
Scale, Proportion, and Quantity	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> <li>Annenberg Learner: Dynamic Earth</li> <li>Hotspot Theory and Plate Velocities</li> </ul>
Systems and System Models	<ul><li>Determining and Measuring Earth's Layered Interior</li><li>Layers of the Earth</li></ul>
Energy and Matter	<ul> <li>Why is the Earth Still Hot Inside?</li> <li>Hotspot Theory and Plate Velocities</li> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> </ul>
Structure and Function	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> <li>Annenberg Learner: Dynamic Earth</li> </ul>
Stability and Change	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> </ul>
Interdependence of Science, Engineering and Technology	<ul> <li>Determining and Measuring Earth's Layered Interior</li> <li>Layers of the Earth</li> <li>Measuring Earth's Vital Magnetic Field</li> <li>Hidden Portals in Earth's Magnetic Field</li> </ul>
Influence of Engineering, Technology and Science on Society and the Natural World	How Do We Know What's Inside Earth?