

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



Disciplinary Core Ideas (DCIs)

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

Cross Cutting Concepts (CCCs)

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