

Congruence with the NGSS

Unit Title: **The Fossil Record and Evolution**

Science and Engineering Practices (SEPs)

SEPS	Activities
Asking Questions and Defining Problems	<ul style="list-style-type: none"> Deep History of Life on Earth Digging up dinosaurs
Developing and Using Models	<ul style="list-style-type: none"> Deep History of Life on Earth The Fossil Record Dinosaur Tracks: From Stride to Leg Length to Speed
Planning and Carrying Out Investigations	<ul style="list-style-type: none"> Dinosaur Tracks: From Stride to Leg Length to Speed
Analyzing and Interpreting Data	<ul style="list-style-type: none"> Dinosaur Tracks: From Stride to Leg Length to Speed The Deep History of a Living Planet
Using Mathematics and Computational Thinking	<ul style="list-style-type: none"> Dinosaur Tracks: From Stride to Leg Length to Speed
Engaging in Argument from Evidence	<ul style="list-style-type: none"> Deep History of Life on Earth The Deep History of a Living Planet Digging up dinosaurs
Obtaining, Evaluating and Communicating Information	<ul style="list-style-type: none"> Deep History of Life on Earth The Deep History of a Living Planet
Scientific Knowledge is based on Empirical Evidence	<ul style="list-style-type: none"> Deep History of Life on Earth The Deep History of a Living Planet

Disciplinary Core Ideas (DCIs)

DCIs	Activities
ESS1B: Earth and the Solar System	<ul style="list-style-type: none"> The Deep History of a Living Planet
ESS1C: The History of Planet Earth	<ul style="list-style-type: none"> Life evolves on a dynamic Earth and continuously modifies Earth Deep History of Life on Earth Digging up Dinosaurs
ESS2A: Earth Materials and Systems	<ul style="list-style-type: none"> The Deep History of a Living Planet
ESS2B: Plate Tectonics and Large-Scale Systems	<ul style="list-style-type: none"> Deep History of Life on Earth The Deep History of a Living Planet

ESS2D: Weather and Climate	<ul style="list-style-type: none"> • The Deep History of a Living Planet
ESS2E: Biogeology	<ul style="list-style-type: none"> • Life evolves on a dynamic Earth and continuously modifies Earth • Deep History of Life on Earth • Digging up Dinosaurs
ESS3A: Natural Resources	<ul style="list-style-type: none"> • Deep History of Life on Earth
ESS3B: Natural Hazards	<ul style="list-style-type: none"> • Deep History of Life on Earth • The Deep History of a Living Planet
ESS3C: Human Impacts on Earth's Systems	<ul style="list-style-type: none"> • Life evolves on a dynamic Earth and continuously modifies Earth
ESS3D: Global Climate Change	<ul style="list-style-type: none"> • The Deep History of a Living Planet

Cross Cutting Concepts (CCCs)

CCCs	Activities
Patterns	<ul style="list-style-type: none"> • The Fossil Record • Digging up Dinosaurs • Dinosaur Tracks: From Stride to Leg Length to Speed
Cause and Effect	<ul style="list-style-type: none"> • Life evolves on a dynamic Earth and continuously modifies Earth • Dinosaur Tracks: From Stride to Leg Length to Speed • The Fossil Record • Deep History of Life on Earth
Systems and System Models	<ul style="list-style-type: none"> • Dinosaur Tracks: From Stride to Leg Length to Speed • Deep History of Life on Earth
Structure and Function	<ul style="list-style-type: none"> • The Fossil Record • The Deep History of a Living Planet • Digging up Dinosaurs
Stability and Change	<ul style="list-style-type: none"> • Life evolves on a dynamic Earth and continuously modifies Earth • The Fossil Record • Deep History of Life on Earth
Interdependence of Science, Engineering and Technology	<ul style="list-style-type: none"> • Digging up Dinosaurs • Dinosaur Tracks: From Stride to Leg Length to Speed
Influence of Engineering, Technology and Science on Society and the Natural World	<ul style="list-style-type: none"> • Deep History of Life on Earth