



Kindergarten Pacing Guide

Earth Materials

Crosscutting Concepts: Patterns, Energy and Matter, Structure and Function

Topics: Soil, Rocks, Water, and Air

Estimated Time Instructional Segment: 7 weeks

Anchoring Phenomenon	Standard	Instructional Segment	Disciplinary Core Ideas	Science and Engineering Practices	Instructional Notes
Bucket Wheel Excavator	SKE2a, b, c	What's Under Your Feet?	From A Framework for K-12 Science Education : ESS2.B Earth's Systems <ul style="list-style-type: none"> Rocks, soils, and sand are present in most areas where plants and animals live. ESS2.C Roles of Water <ul style="list-style-type: none"> Water is found in the ocean, rivers, lakes and ponds. It carries soil and rocks. ESS2.E Biogeology <ul style="list-style-type: none"> Plants and animals (including humans) depend on the land, water, and air to live and grow. ESS3.A Natural Resources <ul style="list-style-type: none"> Living things need water, air, and resources from the land, and they try to live in places that have the things they need. Humans use natural resources for everything they do. 	<ul style="list-style-type: none"> Asking questions Engaging in argument from evidence Obtaining, evaluating and communicating information 	Students should wash their hands after handling soil samples. Eye protection should be worn when students are digging in soil or sand. After students put rocks in containers of water, pour the water outside. By the end of this unit, students are using the following language in their speaking and writing during EXPLAIN or ELABORATE. <ul style="list-style-type: none"> Soil Rocks Water Air Size Weight Texture Color Earth

This instructional segment connects to SKE1a,b time patterns and objects in the day and night sky. Students should utilize prior skills on classification of objects based on composition and attributes in SKP1. Further connections are to SKL1. a, b to evaluate the living and non-living organisms found within earth materials. Students can also explore how earth materials are needed to support living organisms in SKL2.