

## Grade 1- Soils

Lesson	ISI Kit Correlation	Outdoor Learning Center Activity	Skill Building Activity	Habits of Mind	Process Standards	Content Standards
Habitat Comparisons	Lesson 14 : Exploring Local Soil  Lesson 16: What is your local Soil?	Hike the OLC and look at how different factors; soils types, proximity to water and available sun can affect the types of plants and animals that live in an area.  20 to 40 minutes	Observing and describing	Wondering and thinking about the natural and physical world  Seeking answers through exploration	Nature of Science: Note booking  Nature of Science: Investigating  Nature of Science: Observing	1.2.1- Observe & Compare Soil Properties
The Denizens of a Decomposing Log	Lesson 2: Where do dead plants go?	Students will roll over logs and look for signs of soil being made. Which animals play a role in the process and what kind of food web do they live in?  20 to 40 minutes	Observing and describing  Using models in science  Make and use simple equipment and tools, extend the senses to make observations.	Wondering and thinking about the natural and physical world  Developing critical thinking skills  Collaborating and sharing  Seeking answers through exploration	Nature of Science: Note booking  Nature of Science: Investigating  Nature of Science: Observing  Nature of Science: Discussing	1.2.4- Formation of soil
The Wonder of Worms	Lesson 2: Where do dead plants go?  Lesson 13: Composting	Investigate our vermicomposting bins and learn about wonderful worms! Conduct an experiment to test the worms ability to sense light and dark.  20 to 40 minutes	Observing and describing  Make and use simple equipment and tools, extend the senses to make observations.	Wondering and thinking about the natural and physical world  Pursuing ideas in depth  Seeking answers through exploration  Observing carefully	Nature of Science: Note booking  Nature of Science: Investigating  Nature of Science: Observing	1.2.4- Formation of Soil

The Science of Soil	Lesson 3: Introducing Sand, Clay, and Humus  Lesson 4: When Soils Get Wet	What kinds of skills does a soils scientist use? Learn the basics of the job while studying soils samples and sands from around the world.  20 to 40 minutes	Observing and describing  Using models in science  Make and use simple equipment and tools, extend the senses to make observations.	Wondering and thinking about the natural and physical world  Developing critical thinking skills  Collaborating and sharing  Seeking answers through exploration	Nature of Science: Note booking  Nature of Science: Investigating  Nature of Science: Observing	1.1.1- Use senses to identify  1.2.1- Properties & Evidence of Soil Components  1.2.3- Observe & describe
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Additional: Build a Terrarium- soda bottle terrarium for ongoing observations.

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## Standard 1: Physical Science

### **Core Standard:**

Describe objects in terms of the materials that compose them and in terms of their physical properties.

1.1.1 Use all senses as appropriate to identify the component parts of objects and the materials from which they are made.

## Standard 2: Earth and Space Science

### **Core Standard:**

Observe, describe and ask questions about soil components and properties.

1.2.1 Observe and compare properties of sand, clay, silt and organic matter. Look for evidence of sand, clay, silt and organic matter as components of soil samples.

1.2.2 Choose, test and use tools to separate soil samples into component parts.

1.2.3 Observe a variety of soil samples and describe in words and pictures the soil properties in terms of color, particle size and shape, texture, and recognizable living and nonliving items.

1.2.4 Observe over time the effect of organisms like earthworms in the formation of soil from dead plants. Discuss the importance of earthworms in soil.