

Connecting to the Next Generation Science Standards (NGSS Lead States 2013):

The chart below makes one set of connections between the instruction outlined in this article and the NGSS. Other valid connections are likely; however, space restrictions prevent us from listing all possibilities. The materials, lessons, and activities outlined in the article are just one step toward reaching the performance expectation listed below.

2-PS1-1 Matter and Its Interactions

<https://www.nextgenscience.org/pe/2-ps1-1-matter-and-its-interactions>

Science and Engineering Practices

Planning and Carrying out Investigations

Analyzing and Interpreting Data

Constructing Explanations

Classroom Connection:

Students plan an investigation which compares soils in their school yard to beach sand.

Students use grain size data to classify soils.

Students explain what properties are used to classify soils and defend why beach sand is considered a soil.

Disciplinary Core Idea

PS1.A: Structure and Properties of Matter

- Matter can be described and classified by its observable properties.

Classroom Connection:

Students classify soils based on their observable properties of texture and color.

Crosscutting Concepts

Patterns

Scale, Proportion, and Quantity

Classroom Connection:

Students observe multiple soils to look for patterns in particle size and how that relates to the feel of the soil as well as color and how that relates to organic content.

Students classify soils based on texture or relative proportion of sand, silt, and clay-sized particles.

Performance Expectation

2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.