SUGGESTED SKILL

Scientific Experiments

4.C

Describe an aspect of a research method, design, and/or measure used.

AVAILABLE RESOURCES

- External Resource > Environmental Literacy Council's AP Environmental Science Course Material

TOPIC 4.3
Soil Composition and Properties

Required Course Content

ENDURING UNDERSTANDING

ERT-4

Earth's systems interact, resulting in a state of balance over time.

LEARNING OBJECTIVE

ERT-4.C

Describe similarities and differences between properties of different soil types.

ESSENTIAL KNOWLEDGE

ERT-4.C.1

Water holding capacity—the total amount of water soil can hold—varies with different soil types. Water retention contributes to land productivity and fertility of soils.

ERT-4.C.2

The particle size and composition of each soil horizon can affect the porosity, permeability, and fertility of the soil.

ERT-4.C.3

There are a variety of methods to test the chemical, physical, and biological properties of soil that can aid in a variety of decisions, such as irrigation and fertilizer requirements.

ERT-4.C.4

A soil texture triangle is a diagram that allows for the identification and comparison of soil types based on their percentage of clay, silt, and sand.