



Pacifica's Mobile Nature & Horticulture Center

Rock 'n' Roots: Rocks, Minerals, Soil, and Roots Kindergarten and First Grade Program Outline

Introduction: Our lives depend on oxygen, water, and the soil and sun to grow plants. As a quarter of that equation, soil (and its antecedent rocks) is not only a fascinating subject, but a vital one.

NATURE CENTER STATION OBJECTIVES:

1. To examine the characteristics of rocks and minerals.
2. To identify different types of rocks and minerals by size, texture, and color.

ACTIVITIES:

1. Students will sort rocks and minerals by color, texture, and size.
2. Students will sketch and label each type of rock adding color and texture to the drawing.

HORTICULTURE CENTER STATION OBJECTIVES:

1. To describe the different types of soil.
2. To tell how it is made.
3. To explain how it is used in growing plants.

ACTIVITIES:

1. Students will plant seeds in sand and clay soils type.
2. Students will compare and contrast how well the plants grow in the different soils.
3. Students will play the "who uses soil" game.

Connections to the Certificate of Initial Mastery (CIM) Standards:
Nature Center Objectives –

Physical Science: Understand structures and properties of matter and changes that occur in the physical world.

Common Curriculum Goal: MATTER -- Understanding structure and properties of matter.

Content Standards: Identify structures and properties of matter.

Leads to Benchmark at Grade 3:

1. Student will be able to describe objects according to their physical properties.

Horticulture Center Objectives –

Earth and Space Science: Understand physical properties of the Earth, how those properties change, and the Earth's relationship to other celestial bodies.

Common Curriculum Goal: THE DYNAMIC EARTH -- Understand the properties and limited availability of the materials which make up the Earth.

Content Standard: Identify the structure of the earth system and changes that can occur in its physical properties.

Leads to Benchmark at Grade 3:

1. Identify materials that make up the earth.