



Science Unit: *The Earth Around Us: Air, Water & Soil*

Lesson 4: *What is Soil?*

School year: 2007/2008

Developed for: Carnarvon Elementary School, Vancouver School District

Developed by: Linda Hanson (scientist), Moira Corrigan and Tania Pearse (teachers)

Grade level: Presented to Grade 2; appropriate for grades 1 – 7 with age appropriate modifications.

Duration of lesson: 1 hour and 15 minutes

Notes: This lesson is a modification of Lesson 13 Under our Feet from the Temperate Forest science unit, Life Science curriculum area, available from the Scientist in Residence Program website <http://www.scientistinresidence.ca>). The lesson was modified to make it fit better into the theme of air, water and soil and also to link it with previous lessons.

Changes to Objectives

1. Add one additional objective: Recognize that the processes of weathering and erosion contribute to soil formation.
2. Learning about the layers of the soil and the invertebrates present in the soil will be a secondary focus and of less importance than in the existing lesson.

Changes to Materials

- Also need potting soil

Changes to in the Classroom

Introductory Discussion

1. Review the concepts of weathering and erosion. Have the students brainstorm 3 places where erosion occurs in the water cycle.
 - What do the particles that are eroded go?
 - What happens to them?
 - Discuss the idea that deposits of particles accumulate and contribute to the formation of soil.
 - Continue as in the original lesson discussing soil and brainstorming the living and no-living components of soil.
 - Are all types of soil the same?

Changes to Science Activity

1. Students will also examine a container of potting soil to see how it differs from forest soil.

Scientist: _____

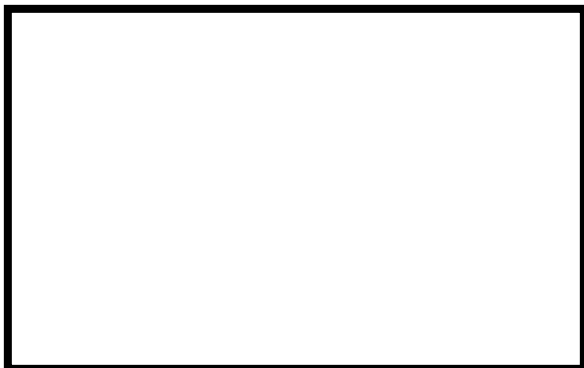
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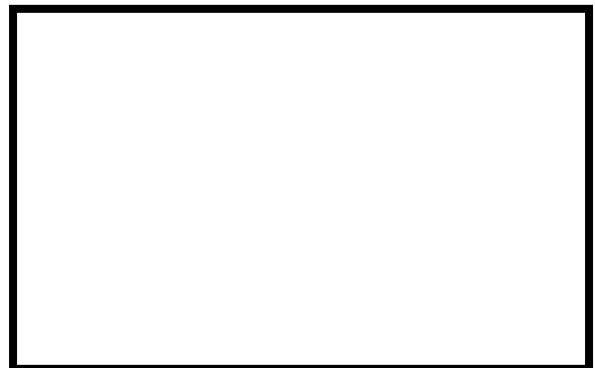
What is Soil?

Draw and label four things you found in your soil sample:









How is natural soil from a garden or a forest different from the soil you can buy in a store?

Brainstorm – what is soil?

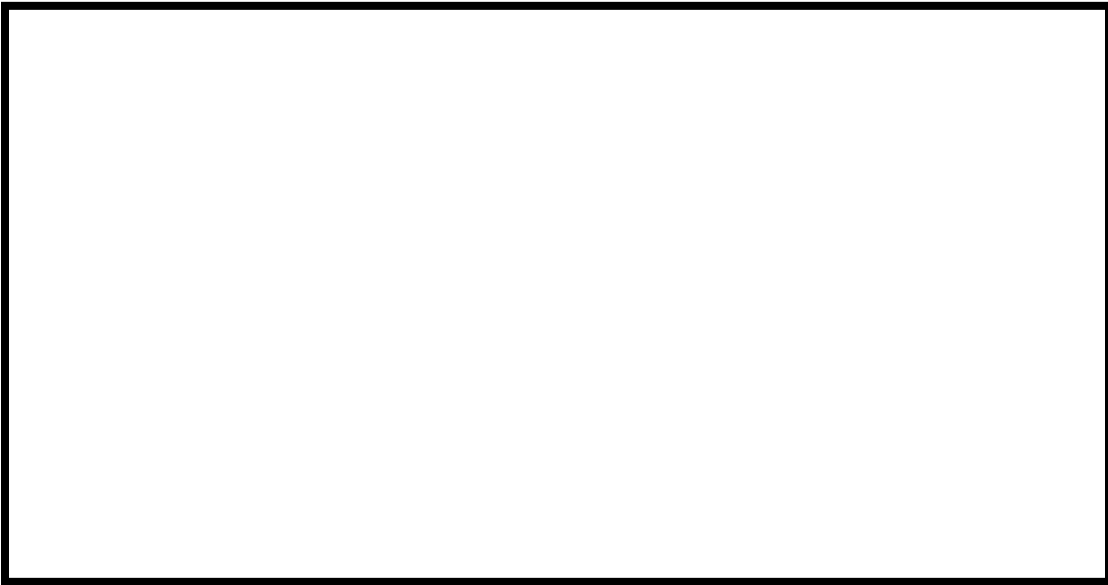
SOIL

Scientist: _____

Date: _____

Separating soil

Draw and label your jar of soil before the experiment



Draw and label your jar of soil after the experiment



How did the soil change?
