

Patterson Farm Dirt on Dirt Tour
Common Core Standards for Third Grade

Science

Essential Standard 3.L.2- Understand how plants survive in their environments.

Clarifying Objective 3.L.2.1- Remember the function of the following structures as it relates to survival of plants in their environments:

roots-absorb nutrients, stems-provide support, leaves-synthesize food, flowers- attract pollinators and produce seeds for reproduction

Clarifying Objective 3.L.2.2- Explain how environmental conditions determine how well plants survive and grow.

Clarifying Objective 3.L.2.3- Summarize the distinct stages of the life cycle of seed plants.

Clarifying Objective 3.L.2.4- Explain how the basic properties (texture and capacity to hold water) and components (sand, clay and humus) of soil determine the ability of soil to support the growth and survival of many plants.

Suggestions: During their visit to Patterson Farms, students will conduct various soil experiments using different types of soil samples. Students will see plants at various stages of life and discuss the parts of the plants. How the climate and over environmental factors effect plant growth will be discussed and students will learn about the irrigation system for the farm. Each class will receive a soil observation kit to take back to their classroom for further testing.

Soil/Dirt Related Books

Dirt by Steve “The Dirtmeister” Tomecek

All About Soil- DVD

Life Under a Stone by Malcolm Penny

Microlife that Lives in Soil by Steve Parker

Soil by Adele Richardson

Soil by Ian Graham

Dirt The Scoop on Soil by Natalie Rosinsky

Website Resources

The Dirt on Soil- <http://school.discoveryeducation.com/schooladventures/soil/>

The Secrets of Soil- <http://forces.si.edu/soils/>

What’s Your Soil IQ? <http://www.biodiversity911.org/swf/soil.html>

Agriculture: Soil- <http://ethemes.missouri.edu/themes/806>

Soil Webquest- http://library.thinkquest.org/J003195F/de_finiti.htm

Underground Adventures (virtual tour under soil)- <http://archive.fieldmuseum.org/undergroundadventure/index.shtml>

Buried Treasure- http://www.epa.gov/oerrpage/superfund/students/clas_act/fall/buried.htm

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