

Blackhawk School District

CURRICULUM

Course Title:	Science Lab
Grade Level(s):	Third
Length of Period:	40 min per day per quarter taught
Faculty Author(s):	Brady Okon
Date:	January 2014

SCIENCE MISSION:

The goal of science education is to develop within students an understanding of the world around us by fostering curiosity, developing inquiry skills, and creating an excitement for learning science.

COURSE DESCRIPTION: The Third Grade Science Lab provides a diverse setting where children participate in hands-on activities in environmental education. Students are introduced to the scientific method, learn inquiry skills, and develop a sense of conservation and stewardship for the environment.

3rd Grade Science Lab Curriculum Overview

Description: The third grade students will deepen their understanding of scientific concepts through inquiry based instruction. They will explore structures of life, earth materials, measurement, sound, and weather.

<p style="text-align: center;">1st Quarter</p> <ul style="list-style-type: none">• Introduction to Science<ul style="list-style-type: none">○ Scientific Method○ Tools of Science • Plants and Seeds Unit<ul style="list-style-type: none">○ Plant Resources○ Plant Parts○ Oxygen cycle	<p style="text-align: center;">2nd Quarter: (Mr. Okon will cover in Science Lab)</p> <ul style="list-style-type: none">• Food Chain Unit<ul style="list-style-type: none">○ Basic Food Chains○ Food Webs○ Soil Formation○ Nutrient Cycle • Earth Materials Foss Kit Part 1<ul style="list-style-type: none">○ Investigation 1 - Mock Rocks○ Investigation 2 – Scratch Test
<p style="text-align: center;">3rd Quarter:</p> <ul style="list-style-type: none">• Earth Materials Foss Kit Part 2<ul style="list-style-type: none">○ Investigation 4 – Take it for Granite○ Fossils • Insect unit<ul style="list-style-type: none">○ What are insects?○ Life Cycles and Metamorphosis○ Roles & Invasive Species○ Integrated Pest Management	<p style="text-align: center;">4th Quarter:</p> <ul style="list-style-type: none">• Pollution and Recycling<ul style="list-style-type: none">○ Identifying Natural Resources○ Pollution○ Reducing, Re-using, Recycling○ Green House Projects • Outdoor Classroom

Course Outline 2 nd Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
<p>Food Chain Recognize and describe change in natural or human-made systems and the possible effects of those changes.</p> <p>Earth Materials FOSS Kit Part 1</p> <p>Describe observable physical properties of matter.</p> <p>Describe the composition of soil as weathered rock and decomposed organic remains.</p>	<p>S3.D.1.2.1: Describe why certain resources are renewable and other resources are nonrenewable.</p> <p>S3.D.1.2.2: Identify and describe examples of renewable and nonrenewable resources.</p> <p>S3.D.1.2.3: Describe the ways living things benefit from the uses of water resources.</p>	<p>5 class periods</p> <p>3 class periods</p>		<p>PDE SAS</p>

Course Outline 3 rd Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
<p>Earth Materials FOSS Kit Part 2</p> <p>Identify the types and uses of Earth’s resources.</p> <p>Describe, explain, and predict change in natural or human-made systems and the possible effects of those changes on the environment.</p> <p>Insects</p> <p>Identify and describe similarities and differences between living things and their life processes.</p> <p>Identify and explain how adaptations help organisms to survive.</p>	<p>S3.D.1.3.1: Identify ways that cause Earth’s surface to be constantly changing (e.g., wind and water erosion, contraction and expansion of surfaces).</p> <p>S3.D.1.3.2: Distinguish between ways that tear down the surface of Earth and those that build up the surface (e.g., erosion, weathering, volcanic activity, earthquakes).</p> <p>S3.D.1.3.3: Distinguish between slow and rapid changes to Earth’s surface (i.e., rapid [earthquakes, volcanic activity]; slow [weathering, erosion]).</p>	<p>3 class periods</p> <p>4 class periods</p>		<p>PDE SAS</p>

Course Outline 4 th Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
<p>Pollution and Recycling</p> <p>Identify and describe human reliance on the environment at the individual or the community level.</p> <p>Recognize basic energy types and sources, or describe how energy can be changed from one form to another.</p>	<p>S3.D.1.2.1: Describe why certain resources are renewable and other resources are nonrenewable.</p> <p>S3.D.1.2.2: Identify and describe examples of renewable and nonrenewable resources.</p> <p>S3.D.1.2.3: Describe the ways living things benefit from the uses of water resources.</p>	8 class periods		PDE SAS

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