Blackhawk School District

CURRICULUM

Course Title:	**Science**
Grade Level(s):	**Third**
Length of Period:	**40 min per day per quarter taught**
Faculty Author(s):	**Matt Merulli and 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 students will deepen their understanding of scientific concepts through inquiry based instruction. They will explore structures of life, measurement, earth materials sound, water, nutrition and recycling.

3rd Grade Science 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.

1st Quarter	2nd Quarter: (Mr. Okon will cover in Science Lab)
Resources: • **Measurement FOSS Kit** • **FOSS Science Stories booklet** • **Delta Science Content Readers** • **Merrill Science Books** -Introduce the necessity for standard units of measurement -Learn and apply appropriate measurement skills in everyday situations	**Resources:** • **Earth Materials FOSS Kit** • **FOSS Science Stories booklet** • **Delta Science Content Readers** • **Merrill Science Books** -Examine the properties of minerals which make up rocks and soil -Work with mock rocks and study the rock cycle -Compare classroom activities to those of a geologist
3rd Quarter: **Resources:** • **Sound FOSS Kit** • **Weather FOSS Kit** • **FOSS Science Stories booklet** • **Delta Science Content Readers** • **Merrill Science Books** -Introduce and experiment with the properties of sound -Observe the process by which the human ear receives sound	**4thQuarter:** **Resources:** • **Structures of Life FOSS Kit** • **FOSS Science Stories booklet** • **Delta Science Content Readers** • **Merrill Science Books** - Use scientific thinking process to conduct investigations and build explanations: observing, communicating, comparing, and organizing (continues throughout year) - Examine the life cycles of organisms, both plants and animals - Compare similar functions of external characteristics of organisms -Understand the basic needs of organisms

The following outline provides a general overview of the course content, not a chronological timetable. The days denoted for each area provide an idea for the overall time spent working with a given topic throughout the school year.

Course Outline 1st Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
Measurement Describe observable physical properties of matter. Recognize and describe change in natural or human-made systems and the possible effects of those changes. Identify appropriate instruments for a specific task and describe the information the instrument can provide.	**S3.A.2.2.1:** Identify appropriate tools or instruments for specific tasks, and describe the information they provide (i.e., measuring [length—ruler; mass— balance scale] and making observations [hand lenses—very small objects]).	12-14 days		Measurement FOSS Kit FOSS Science Stories booklet Delta Science Content Readers Merrill Science books

Course Outline 2nd Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
Rocks and Minerals (Earth Materials) Use models to illustrate simple concepts and compare the models to what they represent. Identify and explain the application of scientific, environmental, or technological knowledge to possible solutions to problems.	**S3.D.1.1.1:** Recognize that rock is composed of different kinds of minerals. **S3.D.1.1.2:** Describe the composition of soil as weathered rock and decomposed organic material.			Earth Materials FOSS Kit FOSS Science Stories booklet Delta Science Content Readers Merrill Science books

Course Outline 3rd Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
Sound Apply skills necessary to conduct an experiment or design a solution to solve a problem. **Weather** Identify basic weather conditions and how they are measured.	**S3.D.2.1.1:** Recognize that clouds have different characteristics that relate to different weather conditions. **S3.D.2.1.2:** Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured. **S3.D.2.1.3:** Identify appropriate instruments to study and measure weather elements (i.e., thermometer [temperature]; wind vane [wind direction]; anemometer [wind speed]; rain gauge [precipitation]).	12-14 days 12-14 days		Sound FOSS Kit FOSS Science Stories booklet Delta Science Content Readers Merrill Science books Weather FOSS Kit FOSS Science Stories booklet Delta Science Content Readers Merrill Science books

Course Outline 4th Quarter	PA Core Standards	Approx. Pacing	Assessment Options	Suggested Resources
Structures of Life Identify systems and describe relationships among parts of a familiar system (e.g., digestive system, simple machines, water cycle). Identify and describe similarities and differences between living things and their life processes.	**S3.B.1.1.1:** Identify and describe the functions of basic structures of animals and plants (e.g., animals [skeleton, heart, lungs]; plants [roots, stem, leaves]). **S3.B.1.1.2:** Classify living things based on their similarities and differences.	12-14 days		Structures of Life FOSS Kit FOSS Science Stories booklet Delta Science Content Readers Merrill Science books