

## Course Description

Science at the elementary level will explore concepts in three main areas: earth science, physical science, and life science. One of the best ways to explore these concepts is through the use of our Hands on Science Laboratory Kits. These kits are the foundation of our elementary program and should have first priority in the curriculum continuum. Measurement, Systems Thinking, Inquiry, Technology and Problem Solving, the processes used to learn and understand science concepts, will be integrated into each unit of science. Units may be taught in any order, due to the constraints and/or availability of lab kits and materials.

## Adopted Materials

Title: *Science*  
 Publisher: Scott Foresman

Title: *Using Science Notebooks in Elementary Classrooms*  
 Publisher: NSTA Press

Hands on Science Laboratory Kits

- FOSS Fabrics
- FOSS Animals Two by Two

## Course Scope

Domains of Science	Nature of Science: Systems (S1)	Nature of Science: Inquiry (S1)	Technology & Problem Solving (S5)
<b>Physical Science (S2)</b> ● Matter	Part-Whole Relationships	Making Observations	Tools & Materials
<b>Life Science (S3)</b> ● Living and Nonliving things ● Plants & Animals ● Habitats			
<b>Earth &amp; Space Science (S4)</b> ● Weather			

Unit	Nature of Science: Systems, Inquiry, Technology & Problem Solving		District Reference K006				
1	<b>Instructional Objective</b> Systems Thinking – Develop an understanding of part to whole relationships.		<b>Standard Reference</b>				
			<b>Science</b>	<b>LA</b> K.LA.6.1 K.LA.6.2	<b>Math</b>		
No.	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		
	<b>Know:</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	Living and Nonliving things are made up of parts.	Given an object, organism or material, students will identify the parts and the whole.		FOSS Fabrics FOSS Animals 2x2			
02	The names of the parts of a system are different from the names of the whole system.	Compare a part of an object with the whole object correctly using the words “whole” and “part”.		FOSS Fabrics FOSS Animals 2x2			
03	Some systems may not work if one or more of its parts are missing.	Predict what would happen if a system had a missing part.		FOSS Fabrics FOSS Animals 2x2			
2	<b>Instructional Objective</b> Inquiry – Develop an understanding that making observations helps us answer questions about nature.		<b>Standard Reference</b>				
			<b>Science</b> K.S.1.4.1 K.S.1.6.1	<b>LA</b> K.LA.6.1 K.LA.6.2 K.LA.4.2	<b>Math</b> K.M.5.2		
No.	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		
	<b>3.25</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	Investigations start with questions about the natural world.	Ask questions about objects, organisms and events in their environment.	Chapters 1-10	FOSS Fabrics FOSS			

				Animals 2x2			
02	Making and recording observations are the first steps to help us answer questions.	Observe patterns and relationships in the natural world and record observations in a table or picture graph.	Chapters 1-10	FOSS Fabrics FOSS Animals 2x2			
03	All observations must be reported honestly and accurately.	Record observations honestly and accurately.	Chapters 1-10	FOSS Fabrics FOSS Animals 2x2	X		
04	Models represent real things in some ways but not others.	Given a model of an object found in the real world, explain how it is like and unlike the object that it represents.	Chapters 1-10	FOSS Fabrics FOSS Animals 2x2			
3	<b>Instructional Objective</b>		<b>Standard Reference</b>				
	Technology & Problem Solving – Develop an understanding that we use tools to help us make observations about nature.		<b>Science</b> K.S.5.1.1	<b>LA</b> K.LA.6.1 K.LA.6.2	<b>Math</b> K.M.2.1		
No.	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		
	<b>Know:</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	Students need to understand the characteristics of a man-made environment.	Describe characteristics of a man-made environment (e.g., home, school...).					
02	Scientists use tools.	Identify simple tools.					

<b>Unit</b>	<b>Physical Science</b>	<b>District Reference K006</b>					
4	<b>Instructional Objective</b>		<b>Standard Reference</b>				
	Matter - Develop an understanding that we observe and describe matter with our senses.		<b>Science</b> K.S.2.1.1 K.S.1.7.1	<b>LA</b> K.LA.6.1 K.LA.6.2	<b>Math</b>		
<b>No</b>	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		

	<b>Know:</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	There are five senses.	Name the five senses (e.g., hear, see, feel, touch, and taste).	Chapter 6	FOSS Fabrics Kit			
02	Matter exists in different states.	Be able to give an example of each of the states of matter (e.g., solid, liquid and gas).	Chapter 6	FOSS Fabrics Kit			
03	Matter can be described using the five senses.	Describe an object using the five senses.	Chapter 6	FOSS Fabrics Kit			

<b>Unit</b>	<b>Life Science</b>	<b>District Reference K006</b>					
<b>5</b>	<b>Instructional Objective</b>  Develop an understanding of the differences between living and nonliving things.	<b>Standard Reference</b>					
		<b>Science</b> K.S.3.2.1 K.S.1.2.1 K.S.1.7.1	<b>LA</b> K.LA.6.1 K.LA.6.2	<b>Math</b> K.M.4.1			
<b>No.</b>	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		
	<b>Know:</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	Living things need food, water, air, shelter, and space.	Describe or list what a living thing needs to survive.	Chapter 1	FOSS Animals 2x2	X		
02	Living things can grow and change.	Describe (orally, drawing, writing, etc.) how a living thing grows and changes.	Chapter 2	FOSS Animals 2x2	X		
03	Nonliving things cannot move, grow or change, on their own.	Explain why an object is nonliving.	Chapter 2				
<b>6</b>	<b>Instructional Objective</b>		<b>Standard Reference</b>				

			<b>Science</b> K.S.3.1.1 K.S.1.2.1 K.S.1.7.1	<b>LA</b> K.LA.6.1 K.LA.6.2	<b>Math</b> K.M.4.1		
<b>No.</b>	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		
	<b>Know:</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	Plants and animals have external parts.	Name basic part of plants (e.g., stem, leaves, flower, and roots). Name the basic parts of animals (e.g., legs, head, body, arms, wings, beak, feet, and tail).	Chapter 1				
02	Different animals use their body parts in different ways to see, hear, hold things, and move from place to place.	Compare plants and animals according to their similarities and differences.	Chapter 1	FOSS Animals 2x2			
04	Plants need water, light, air and soil to grow.	Describe (orally or pictorially) what plants need to grow.	Chapter 1		X		
7	<b>Instructional Objective</b>  Develop an understanding that living things need favorable habitats to live.		<b>Standard Reference</b>				
			<b>Science</b> K.S.3.1.1 K.S.1.2.1 K.S.1.7.1	<b>LA</b> K.LA.6.1 K.LA.6.2	<b>Math</b> K.M.4.1		
<b>No.</b>	<b>Objectives</b>		<b>Resources</b>		<b>Assessment</b>		
	<b>Know:</b>	<b>Be Able To:</b>	<b>Text</b>	<b>Labs or Activities</b>	<b>S N</b>	<b>E O C</b>	<b>I S A T</b>
01	Habitats consist of food, water, shelter, air and space.	Create or describe the components of a habitat.	Chapter 3	FOSS Animals 2x2	X		
02	Each animal has a specific habitat that meets their needs.	Match animals with their habitats.	Chapter 3	FOSS Animals 2x2			

<b>Unit</b>	<b>Earth Science</b>	<b>District Reference K006</b>
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8	Goal – Instructional Objective Develop an understanding of how the weather changes with the seasons.		Standard Reference				
			Science K.S.4.1 K.S.1.4 K.S.1.2	LA K.LA.6.1 K.LA.6.2	Math		
No.	Objectives		Resources		Assessment		
	Know:	Be Able To:	Text	Labs or Activities	S N	E O C	I S A T
01	The four seasons are fall, winter, spring and summer.	Name the four seasons and put them in order.	Chapter 5				
02	Weather conditions are different during each of the four seasons.	Observe and identify daily weather conditions.	Chapter 5				