



2nd Grade Lessons Offered

Lesson Title & Description	Standards	Curriculum Correlation	Lesson Length	Season, Location & Special Requirements	No. of Garden Parents
<p>Life Cycle of a Tomato:</p> <p>Students study the life cycle of a plant as they save tomato seeds from heirloom tomatoes provided or harvested in the school garden and plant them in the late winter/early spring to grow new seedlings.</p>	<p>Next Generation Science Standards: 2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.</p> <p>Framework for K-12 Science Education Science & Engineering Practices Planning and carrying out investigations Disciplinary Core Ideas LS2.A: Interdependent Relationships in Ecosystems “Plants depend on water and light to grow. (2-LS2-1) Crosscutting Concepts Cause and effect “Events have causes that generate observable patterns. (2-LS2-1) Structure and function “The shape and stability of structures of natural and designed objects are related to their function(s). (2-LS2-2)</p> <p>Common Core Connections: W.2.8 Recall information from experiences or gather information from provided sources to answer a question. MP.5 Use appropriate tools strategically 2.MD.D.10 Draw a picture graph and a bar graph (with a single unit scale) to represent a data set with up to four categories.</p>	<p>FOSS <i>Insects and Plants</i> Module</p> <p>“Brassica Seeds” Investigation</p>	<p>Session #1 60 Minutes</p> <p>Session #2 60 Minutes</p> <p>Session #3 45 Minutes</p> <p><i>Please schedule the first 2 sessions a week or two apart.</i></p>	<p>Fall – Session #1 From: 9/13/16 Through: 10/28/16</p> <p>Fall – Session #2 From: 9/20/16 Through: 11/18/16</p> <p>Spring – Session #3 From: 4/10/17 Through: 6/1/17</p> <p>Indoor & Outdoor</p> <p>Requirement: This is a harvesting & planting lesson. Students harvest from a growing tomato plant in the school’s garden or teacher’s planter box & will plant seeds in small pots to be kept in the school’s greenhouse or on a sunny windowsill in the classroom until ready to transfer to the school’s garden for next year’s 2nd graders</p>	<p>2 Garden Parents for Sessions #1 & #2</p> <p>2 Garden Parent for Session #3</p>

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<p><i>From Seed to Pretzel:</i></p> <p>Students experience the life cycle of the wheat plant by planting wheat seeds in the fall, harvesting and threshing the wheat in late spring, grinding the wheat berries to make flour, and baking pretzels.</p>	<p>Next Generation Science Standards: 2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.</p> <p>Framework for K-12 Science Education Science & Engineering Practices Planning and carrying out investigations</p> <p>Disciplinary Core Ideas LS2.A: Interdependent Relationships in Ecosystems “Plants depend on water and light to grow. (2-LS2-1)</p> <p>Crosscutting Concepts Cause and effect “Events have causes that generate observable patterns. (2-LS2-1) Structure and function “The shape and stability of structures of natural and designed objects are related to their function(s). (2-LS2-2)</p> <p>Common Core Connections: W.2.8 Recall information from experiences or gather information from provided sources to answer a question. MP.5 Use appropriate tools strategically</p> <p>Social Studies Standard Social Studies 2.4.1 Describe food production and consumption long ago and today, including the roles of farmers, processors, distributors, weather, and land and water resources.</p>	<p>FOSS <i>Insects and Plants</i> Module</p> <p>“Brassica Seeds” Investigation</p> <p>It also ties in with the Producers and Consumers unit for Social Studies.</p>	<p>Session #1, 60 Minutes</p> <p>Session #2, 60 Minutes Recommended mid-late May</p> <p>Session #3, 60-90 Minutes Schedule any time after Session #2</p>	<p>Fall - Session #1 From: 9/13/16 Through: 11/6/16</p> <p>Spring - Session #2 From: 5/2/17 Through: 6/1/17</p> <p>Spring - Session #3 From: 5/9/17 Through: 6/1/17</p> <p>All Sessions Outdoors</p> <p>Requirement: This is a planting & harvesting lesson. Space is needed in a sunny planter box or in the school’s garden from October through June.</p>	<p>Session #1 2 Garden Parents</p> <p>Session #2 2 Garden Parents</p> <p>Session #3 3 Garden Parents</p>

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<p>Leaf Attributes:</p> <p>Students collect and compare the attributes of various leaves as they work with a small group to create an “Attribute Train” organizing their leaves based on shared characteristics.</p>	<p>Next Generation Science Standards: 2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties</p> <p>Framework for K-12 Science Education Disciplinary Core Ideas 2-PS1-2 “Different properties are suited to different purposes.” Crosscutting Concepts “Patterns in the natural and human designed world can be observed.”</p>	<p>FOSS <i>Insects and Plants</i> Module</p>	<p>One session, 60 Minutes</p>	<p>Winter Date Range: From: 1/3/17 Through: 3/31/17 Indoor & Outdoor</p>	<p>3 Garden Parents Needed</p>

Lesson Title & Description	Standards	FOSS Correlation	Lesson Length	Season, Location & Special Requirements	No. of Garden Parents
<p><i>Dirt Detectives:</i> Students investigate the physical properties of soil as they explore the contents of garden soil, discover that the components of soil have different densities, and conduct an experiment to determine which types of soil hold the most water.</p> <p><u>Soil Discoveries:</u> Students investigate and discover various components of garden soil and compost.</p> <p><u>Mudshakes:</u> By mixing water and soil in a jar, students compare the layers of sand, silt, clay and organic matter formed by different soils.</p> <p><u>Does it Hold Water?</u> Students perform a simple filter experiment to explore the capacity of various soils to hold water.</p>	<p>Next Generation Science Standards: 2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties</p> <p>Framework for K-12 Science Education</p> <p>Disciplinary Core Ideas 2-PS1-2 “Different properties are suited to different purposes.”</p> <p>Crosscutting Concepts “Patterns in the natural and human designed world can be observed.”</p>	<p>FOSS <i>Pebbles, Sand and Silt</i> Module</p> <p>“Soil Explorations” Investigation</p> <p><i>This lesson, as part of a three part rotation and can be used as a substitute for some of the Soil Explorations investigation.</i></p>	<p>One session, 60 Minutes</p>	<p>Winter Date Range: From: 1/3/17 Through: 3/31/17</p> <p>Indoor & Outdoor</p>	<p>2 Garden Parents Needed</p>

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<p><i>Garden Treasures:</i></p> <p>Students review coordinate graphing as they work in pairs to locate “treasures” in the garden using a life-sized coordinate grid. They also plot several elements of their school garden.</p>	<p>Common Core Connections: Represent and interpret data.</p> <p>9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</p> <p>MP.5 Use appropriate tools strategically</p> <p>Social Studies Content Standards</p> <p>2.2 Students demonstrate map skills by describing the absolute and relative locations of people, places, and environments.</p> <ol style="list-style-type: none"> 1. Locate on a simple letter-number grid system the specific locations and geographic features in their neighborhood or community (e.g., map of the classroom, the school). 		<p>One session, 60 Minutes</p>	<p>Winter Date Range:</p> <p>From: 1/3/17 Through: 3/31/17</p> <p>Outdoors</p> <p>Life Size Coordinate Grid occurs on lawn or black top. The plotting activity occurs in a designated school garden area.</p>	<p>2-3 Garden Parents needed</p>