

Science Curriculum Map

Unit Title: Physical Science Grade:2

Quarter: x 1 2 3 4

Unit Topic: Air Length: 13 ½ hour sessions

Learner Outcomes /Competencies:

- Air can move things.
- You can feel air.
- Air takes up space.
- Air is matter.
- Air can be trapped in a vial under water.
- Air bubbles come out of the vial if tipped.
- A parachute falls slowly because air pushes against it.
- Air resistance slows the parachute.
- Compressed air creates pressure.
- Air pressure can move water.

Big Idea: Matter has observable and physical properties

Anchor/Standards:

- S.3.C.1.1 Describe the observable physical properties of matter.
- S.3.C.1.1.3 Classify a substance as a solid, liquid, or gas.
- S.3.C.3.1 Observe and identify changes in an object's motion.
- S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning).
- S.3.D.2.1 Identify basic weather conditions and how they are measured.
- S.3.D.2.1.1 Recognize that clouds have different characteristics that relate to different weather conditions.
- S.3.D.2.1.2 Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured.
- S.3.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]).
- 3.2.3.A1:** Differentiate between properties of objects such as size, shape, and weight and properties of materials that make up the objects such as color, texture, and hardness.
- Differentiate between the three states of matter, classifying a substance as a solid, liquid, or gas.

Inquiry

- 3.2.3.A6:** Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.
- 3.2.3.B1:** Explain how movement can be described in many ways.

Assessments

- Student Journals
- Anecdotal Notes
- Teacher Observation

<p>Science Process Skills Organizing Observation Inferring Predicting Comparing Communicating</p>	<p>Vocabulary Air Air resistance Barrel Bubble Compress Distance Fountain Gas Inflate Invisible Matter Move Paper towel Parachute Plunger Pressure Propel Rocket Submerge Syringe System Travel Tubing.</p>	<p>Math Integration Graphing Problem Solving</p> <p>Reading Integration Comparing Inductive Reasoning • Predictions • Inferences</p>	<p>Resources Foss Kit: Air and Weather</p> <p>Materials Investigation 1 see page 8,13,17,21,27,34,</p>
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Science Curriculum Map

Unit Title: Earth Science

Grade: 2

Quarter: 1 X 2 3 4

Unit Topic: Weather	Length:	
<p>Learner Outcomes /Competencies: Meteorologists are scientist who study weather. Scientific journals record observations accurately. Thermometer measures temperature. There are different types of clouds. Wind makes clouds move. Clouds are made of drops of water in the air. Clouds can determine types of weather. Rain gauges measure rainfall.</p>	<p>Big Idea: The earth system changes constantly as air, water, soil, and rock interact, and the earth is a part of a larger sun, earth, moon system.</p> <p>Anchor/Standards: S.3.D.2.1 Identify basic weather conditions and how they are measured. S.3.D.2.1.1 Recognize that clouds have different characteristics that relate to different weather conditions. S.3.D.2.1.2 Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured. S.3.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]). 3.3.A.4: Connect the various forms of precipitation to the weather in a particular place and time. 3.3.A.5: Explain how air temperature, moisture, wind speed and direction, and precipitation make up the weather in a particular place and time 3.3.A.7: Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p>	<p>Assessments: Student Journals Teacher Observation Anecdotal Notes</p>

<p>Science Process Skills: Comparing Communicating Observing Organizing</p>	<p>Vocabulary: Cirrus, clouds Cold, cool Cumulus Degrees Celsius Degrees Fahrenheit Freezing, hot Meteorologist Monitor, overcast Partly cloudy Rain gauge Rainy, snowy Stratus, sunny Symbol, temperature Thermometer, tool Warm, weather Weather instrument</p>	<p>Math Integration: Graphing Problem Solving</p> <p>Reading Integration: Comparing Inductive Reasoning -predictions -inferences</p>	<p>Resources: Foss Kit: Air and Weather</p> <p>Materials: Investigation 2-see page #'s 8, 14,20,24</p>
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Science Curriculum Map

Unit Title: Earth Science Grade:2

Quarter: 1 X 2 3 4

<p>Unit Topic: Wind</p>	<p>Length: 8-10- ½ hour sessions</p>	<p>Big Idea: A force is required to change an object's speed or direction.</p>
<p>Learner Outcomes /Competencies: Bubbles are filled with air. Bubbles move with the air. They can show how fast or slow air is moving. They can show the direction air is moving. Meteorologists use an anemometer to measure how fast the wind is blowing. Wind vanes tell us the direction the wind is coming from. You can use things like bubbles, clouds, and flags to tell the direction of the wind. Air pushes against a kite to make it fly. A wind vane can help you know which direction to fly the kite. An anemometer can help you decide if there is enough wind for a kite to fly.</p>	<p>Assessments Anecdotal Notes Student Journals Teacher observation</p>	<p>Big Idea: A force is required to change an object's speed or direction.</p>
<p>Anchor/Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). S.3.D.2.1 Identify basic weather conditions and how they are measured. S.3.D.2.1.2 Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured. S.3.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]). S.3.C.2.1 Recognize basic energy types and sources and how energy can be changed from one form to another. S.3.C.2.1.1 Identify basic forms and sources of energy (e.g., Sun, heat, light, sound). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that</p>	<p>Anchor/Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). S.3.D.2.1 Identify basic weather conditions and how they are measured. S.3.D.2.1.2 Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured. S.3.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]). S.3.C.2.1 Recognize basic energy types and sources and how energy can be changed from one form to another. S.3.C.2.1.1 Identify basic forms and sources of energy (e.g., Sun, heat, light, sound). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that</p>	<p>Anchor/Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). S.3.D.2.1 Identify basic weather conditions and how they are measured. S.3.D.2.1.2 Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured. S.3.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]). S.3.C.2.1 Recognize basic energy types and sources and how energy can be changed from one form to another. S.3.C.2.1.1 Identify basic forms and sources of energy (e.g., Sun, heat, light, sound). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that</p>

	<p>different questions require different kinds of investigations. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information.</p> <p>Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge.</p>	
<p>Resources</p> <p>Foss Kit: Air and Weather</p> <p>Materials</p> <p>Investigation 3 see page 8,12,17,22,28,</p>	<p>Math Integration</p> <p>Graphing Problem solving</p> <p>Reading Integration</p> <p>Compare and Contrast *alike/different</p>	<p>Science Process Skills</p> <p>Organizing Observation Comparing Communicating</p> <p>Vocabulary</p> <p>Anemometer Bubble Calm Direction East Flying line Gentle breeze Kite Moderate breeze North Pinwheel South Strong breeze Tail West Wind Wind Vane</p>

Science Curriculum Map

Unit Title: Earth Science

Grade: 2

Quarter: 1 2 3 4

Unit Topic: Observing Change	Length:	
<p>Learner Outcomes /Competencies: Graphs organize information and make it easy to compare types of weather. Weather can change. Weather changes with the seasons. The moon changes in a pattern.</p>	<p>Big Idea: The earth system changes constantly as air, water, soil, and rock interact, and the earth is a part of a larger sun, earth, moon system.</p> <p>Anchor/Standards: S.3.D.2.1 Identify basic weather conditions and how they are measured. S.3.D.2.1.1 Recognize that clouds have different characteristics that relate to different weather conditions. S.3.D.2.1.2 Describe how weather variables (i.e., temperature, wind speed, wind direction, and precipitation) are observed and measured. S.3.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]). 3.3.3.A4: Connect the various forms of precipitation to the weather in a particular place and time. 3.3.3.A5: Explain how air temperature, moisture, wind speed and direction, and precipitation make up the weather in a particular place and time 3.3.3.A7: Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p>	<p>Assessments: Student Journal Student Graph</p>

<p>Science Process Skills: Comparing Communicating Observing Organizing</p>	<p>Vocabulary: graph change column Moon precipitation row season star Sun total</p>	<p>Math Integration: Graphing Problem Solving</p> <p>Reading Integration: Deductive Reasoning -predictions Classifying/Categorizing -classify -organize Compare/Contrast</p>	<p>Resources: Foss Kit: Air and Weather</p> <p>Materials: Investigation 4--see pages 8, 12, 19</p>
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Science Curriculum Map

Unit Title: Physical Science Grade:2

Quarter: 1 2 3 4

<p>Unit Topic: Balance</p>	<p>Length: 10- ½ sessions</p>	<p>Big Idea: An object's motion is the result of all forces acting on it.</p>
<p>Learner Outcomes /Competencies: Something is balanced when it stays in a position on its own without being held there. The clothespins (counterweights) should go low on the crayfish to make it balance. You can tell something is in a stable position if the counter weights are below the balance point. The trick to balancing anything is to add counterweights below the balance point. To balance a mobile you can move the object on the straws, if one end of a straw is too low the objects attached there must be moved toward the balance point. Mobiles can be made from anything-toys, dolls, pieces of colored plastic, or cloth.</p>	<p>Assessments Anecdotal Notes Student Sheet Teacher Observation</p>	<p>Assessments Anecdotal Notes Student Sheet Teacher Observation</p>

<p>Science Process Skills Organizing Observation Comparing Communicating</p>	<p>Vocabulary Arch Balance Balance point Clothespin Counterbalance Counterweight Crayfish Mobile Object Position Stable System Triangle Unstable Weight Wire</p>	<p>Math Integration Problem Solving</p> <p>Reading Integration Inductive Reasoning *hypothesis *generalize Abstracting *relationships *patterns</p>	<p>Resources Foss Kit: Balance and Motion</p> <p>Materials Investigation 1 – see page 8,14,19,24,</p>
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Science Curriculum Map

Unit Title: Physical Science

Grade: 2

Quarter: 1 2 3 4

Unit Topic: Spinners	Length:	Big Idea: A force is required to change an object's speed or direction	Assessments:
<p>Learner Outcomes /Competencies: You need a force to start a top spinning. Fast spinning tops are more stable than slow. Bigger tops are more stable and spin longer. Tops and zoomers spin. Different forces begin motion. More force creates more speed. Tops, zoomers and twirlers rotate.</p>	<p>Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p>	<p>Teacher Observation Anecdotal Notes</p>	<p>Resources: Foss Kit: Balance and Motion</p>
<p>Science Process Skills: Comparing Communicating Observing Organizing</p>	<p>Vocabulary: air resistance axis disk knot motion</p>	<p>Math Integration: Problem Solving</p>	<p>Resources: Foss Kit: Balance and Motion</p>

	<p>rotate shaft spin swirl top twirl twist whirl wing zoomer</p>	<p>Reading Integration: Deductive reasoning -cause/effect -prediction</p>	<p>Materials: Investigation 2-see pages 8, 14, 20</p>
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Science Curriculum Map

Unit Title: Physical Science Grade:2

Quarter: 1 2 3 4

<p>Unit Topic: Rollers</p>	<p>Length: 9-1/2 hour sessions</p>	<p>Big Idea: A force is required to change an object's speed or direction.</p>
<p>Learner Outcomes /Competencies: Things roll down ramps. Use two wheels the same size on an axle to roll straight. Use rolls of different sizes to make a roller that turns. Some things that roll are rolling pins, carts, pencils, and balls. A cup will roll in the direction of the smaller end. To make a cup roll straight, tape another cup to it and let it roll on the large ends. Weights can slow down, speed up, or stop the rolling motion of a cup. Round things roll. A cup rolls in a curved path because it is smaller on one end. A sphere can roll in all directions, it rolls down a slope. To make a marble roll all the way down a runway, start high and end low.</p>	<p>Assessments Anecdotal notes Student sheet Teacher observation</p>	<p>Big Idea: A force is required to change an object's speed or direction.</p>
<p>Anchor/Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p>	<p>Anchor/Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p>	<p>Anchor/Standards: S.3.C.3.1 Observe and identify changes in an object's motion. S.3.C.3.1.1 Identify and describe an object's motion (e.g., start/stop, push/pull, up/down, left/right, faster/slower, spinning). S.3.C.3.1.2 Describe an object's position in terms of its relationship to another object or stationary background (e.g., behind, beside, on top of, above, below). 3.2.3.B1: Explain how movement can be described in many ways. 3.2.3.B2: Explore energy's ability to cause motion or create change. Explore how energy can be found in moving objects, light, sound, and heat. 3.2.3.B7: Ask questions about objects, organisms, and events. Understand that all scientific investigations involve asking and answering questions and comparing the answer with what is already known. Plan and conduct a simple investigation and understand that different questions require different kinds of investigations. Use simple equipment (tools and other technologies) to gather data and understand that this allows scientists to collect more information than relying only on their senses to gather information. Use data/evidence to construct explanations and understand that scientists develop explanations based on their evidence and compare them with their current scientific knowledge. Communicate procedures and explanations giving priority to evidence and understanding that scientists make their results public, describe their investigations so they can be reproduced, and review and ask questions about the work of other scientists.</p>

<p>Science Process Skills Organizing Observation Comparing Communicating</p>	<p>Vocabulary Axle Disk Loop Motion Ramp Roll Runway Slope Sphere Spiral Wheel</p>	<p>Math Integration Problem Solving</p> <p>Reading Integration Deductive Reasoning Cause and effect Prediction Conclusion</p>	<p>Resources Foss Kit: Balance and Motion</p> <p>Materials Investigation 3- see page 6,13,19</p>
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Science Curriculum Map

Unit Title: New Plants Grade: 2

Quarter: 1 2 3 4

<p>Unit Topic: Brassica Seeds</p> <p>Length: 8 – 30 minutes lessons; ongoing</p> <p>Learner Outcomes /Competencies: Plants usually have stems and leaves, and some have flowers. Plants grow and so are alive. The brassica plants need light, air, water and nutrients from the soil to grow. Brassica plants start from seed. Observation of structures: sprouts (roots below ground), stems, leaves, flowers, seed pods and seeds. Insects move pollen from flower to flower.</p>		<p>Big Idea: All living things are made of parts that have specific functions.</p>	
<p>Science Process Skills Observation Inferring Classifying Predicting Communicating Acquiring Data Analyzing Investigations and Their Data Understanding Cause and Effect</p>		<p>Assessments Journals Teacher Observation Discussion</p>	
<p>Science Process Skills Observation Inferring Classifying Predicting Communicating Acquiring Data Analyzing Investigations and Their Data Understanding Cause and Effect</p>		<p>Math Integration Patterns of leaf growth Comparing lengths of stems Number patterns in collected data</p>	<p>Resources Foss kit –New plants – investigation 1</p> <p>Materials Investigation 1 – p. 8, 13, 23</p>
<p>Vocabulary Plant Calendar Journal Brassica Soil Light Water Fertilizer Nutrient Sprout Seedling Stem Leaves or leaf Bud Flower Pollen Seed Pod Seed Root</p>		<p>Reading Integration Labeling plant parts and structures</p>	

Science Curriculum Map

Unit Title: New Plants Grade: 2

Quarter: 1 2 3 4

<p>Unit Topic: Grass and Grain Seeds</p> <p>Learner Outcomes /Competencies: Plants need light, water, air and nutrients from the soil. Seeds have different characteristics. Alfalfa plants have stems with leaves on top. After mowing only the grass plants grow back. Leaves grow up. Leaves capture light for the plant. Roots grow down. Water travels from roots to stem and leaves. Seeds are alive because they can grow.</p>	<p>Length: 8 - 30 minutes lessons (ongoing)</p> <p>Big Idea: All living things are made of parts that have specific functions.</p> <p>Assessments Teacher Observation Discussion Diagrams Sequence</p>
<p>Science Process Skills Observation Inferring Classifying Predicting Communicating Acquiring Data Analyzing Investigations and Their Data Understanding Cause and Effect</p>	<p>Math Integration Sorting and classify seed mixtures. Label each group with seeds properties. Observe and draw symmetry in plants.</p> <p>Reading Integration Write story about what it's like to be a plant.</p>
<p>Vocabulary Alfalfa Bud Change Different Fertilizer Germination Grain Grass Grow Lawn Leaf Mold Mow Plant Root Rye grass Same Seed Soil Sprout Stem Structure Wheat</p>	<p>Resources Foss kit -New plants - Investigation 2</p> <p>Materials Investigation 2 - p. 8, 15, 20</p>

Science Curriculum Map

Unit Title: New Plants Grade: 2

Quarter: 1 2 3 4

<p>Unit Topic: Stems</p>	<p>Length: 6 – 30 minute sessions (ongoing)</p>	<p>Big Idea: All living things are made of parts that have specific functions.</p>
<p>Learner Outcomes /Competencies: Not all cuttings grow roots. Cuttings with nodes under water and leaves grow roots. Roots form at the nodes on the stems under the water. New leaves are growing on the nodes above the water. New Plants are made from old stems because new leaves and roots grow. A stem with a node is needed to make a new plant. Plants need light, air, water and nutrients. Potatoes are underground stems of the potato plant. New plant stems and roots grow from the nodes of potatoes.</p>	<p>Assessments Teacher Observation Discussion</p>	<p>Anchor/Standards: 3.1.3.A1: Describe characteristics of living things that help to identify and classify them. 3.1.3.A2: Describe the basic needs of living things and their dependence on light, food, air, water, and shelter. 3.1.3.A3: Illustrate how plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death. 3.1.3.A5: Identify the structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection.</p>
<p>Science Process Skills Observation Inferring Classifying Predicting Communicating Understanding Cause and Effect</p>	<p>Math Integration Math Story Problems involving plants. Reading Integration</p>	<p>Resources Foss kit –New plants – investigation 3</p> <p>Materials Investigation 3 p. 8, 14, 19</p>
<p>Vocabulary Alive Bud Cutting Fertilizer Grow Leaf Node Plant Potato Eye Root Soil Sprout Stem</p>		

Science Curriculum Map

Unit Title: New Plants Grade: 2

Quarter: 1 2 3 4

<p>Unit Topic: Bulbs and Roots</p> <p>Length: 4 – 30 minutes lessons (ongoing)</p> <p>Learner Outcomes /Competencies: Bulbs need water to start growing. The roots grow first from the bottom. The leaves grow out from the middle. New plants can grow from roots if part of the stem is included. New leaves or roots show plant growth. New leaves get light and make food so the plant can grow.</p>	<p>Big Idea: All living things are made of parts that have specific functions.</p> <p>Anchors/Standards: 3.1.3.A1: Describe characteristics of living things that help to identify and classify them. 3.1.3.A2: Describe the basic needs of living things and their dependence on light, food, air, water, and shelter. 3.1.3.A3: Illustrate how plants and animals go through predictable life cycles that include birth, growth, development, reproduction, and death. 3.1.3.A5: Identify the structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection</p>	<p>Assessments Teacher Observation Discussion Diagram</p>
<p>Science Process Skills Observation Inferring Classifying Predicting Communicating Understanding Cause and Effect</p>	<p>Vocabulary Bud Bulb Carrot Garlic Onion Radish Root Sprout Vermiculite</p>	<p>Math Integration Math story problems including bulbs.</p> <p>Reading Integration Explore multiple meaning words (homonyms) with eyes.</p>
		<p>Resources Foss kit – Investigation 4</p> <p>Materials Investigation 4 –p. 7, 13</p>