

LESSON PLAN FORM 1

Date(s)/Duration 1 – 2 days

Unit Title: Outdoor Survivors

Essential Question: #1, #2

Targeted Standard(s): 2.1

Major Content: SS-E-3.3.1

<p>Key Vocabulary: Supply demand survey Flower vegetable herb Greenhouse water bed</p> <p>Objective: For students to determine which seeds they will plant.</p> <p>Activity/Procedures: 1. Discuss the terms supply, demand, and survey. Be sure students understand these terms completely. 2. Students will brainstorm a wide variety of flowers, vegetables and herbs. As a whole class they will narrow their list down to 5 to 7 plants per category. 3. Working in cooperative groups students will use the Survey Form memo to conduct their survey of all 5th grade students in order to determine which plants they will grow. 4. After all surveys have been completed, as a whole class discuss the results and come to a final agreement on the most popular plants.</p>	<p>Resources: Survey Form memo</p>
	<p>Assessment: (List assessments used to ensure student learning) Final survey results</p>
	<p>Marzano Strategies: Cooperative groups</p>
	<p>Integrated Technologies:</p>
	<p>Writing Component:</p>
	<p>Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>

LESSON PLAN FORM 2**Date(s)/Duration** 3 - 4 days**Unit Title:** Outdoor Survivors**Essential Question:** #1, #2,**Targeted Standard(s):** 2.5 and 2.6**Major Content:** SC-M-2.1.5

<p>Key Vocabulary: Pollution pH level oxygen temperature Nitrate phosphate</p> <p>Objective: To determine the quality of water in our pond in the Outdoor Classroom.</p> <p>Activity/Procedures: Connect the PC Link to the computer so students can learn to launch, recall data, read graphs, and use probes from the data loggers.</p> <p>Students place data loggers in the different areas of the pond to record temperature over several days.</p> <p>Students spend 2 – 3 days conducting water quality tests. Combine the results from all classes. Using this data students will determine the quality level of the water.</p> <p>If the water quality is excellent or good – have students write in their journals ways they think these levels could be maintained? If the water quality is not good – have students explain in their journals why they think it is at this level and what could possibly be done to improve the quality?</p>	<p>Resources: Data loggers Computer lab Water quality test kit Outdoor Classroom pond</p>
	<p>Assessment: (List assessments used to ensure student learning) Discussion of results</p>
	<p>Marzano Strategies: Nonlinguistic representation</p>
	<p>Integrated Technologies: Computer PC Link Data loggers</p>
	<p>Writing Component: Journal writing</p>
	<p>Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>

LESSON PLAN FORM 4**Date(s)/Duration** 1 day**Unit Title:** Outdoor Survivors**Essential Question:** #2**Targeted Standard(s):** 2.5 and 2.6**Major Content:** SC-M-2.1.4

<p>Key Vocabulary: Erosion soil test</p> <p>Objective: To determine quality of soil samples.</p> <p>Activity/Procedures: Have a guest speaker form the Soil Conservation District to discuss soil erosion and conduct a demonstration showing erosion and ways it can be controlled.</p> <p>Students conduct soil tests on samples of soil they brought from home. Guest speaker demonstrates and leads the lesson.</p> <p>Students are given free trees from the Soil Conservation District.</p> <p>Have students write thank you letters to the guest speaker thanking them for conducting the tests and providing the trees.</p>	<p>Resources: Guest speaker from the Soil Conservation District Soil test kits – provided guest speaker Soil samples from home (may use left over from previous lesson)</p>
	<p>Assessment: (List assessments used to ensure student learning) Soil test results</p>
	<p>Marzano Strategies: Nonlinguistic representation</p>
	<p>Integrated Technologies:</p>
	<p>Writing Component: Thank you letters</p>
	<p>Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>

LESSON PLAN FORM 5

Date(s)/Duration 1 day

Unit Title: Outdoor Survivors

Essential Question: #1

Targeted Standard(s): 2.5 and 2.6

Major Content: SC-M-2.1.4 SC-M-3.5.3

<p>Key Vocabulary: Biomes precipitation temperature Sunlight soil type</p> <p>Objective: To discover the factors that determine the conditions of a biome.</p> <p>Activity/Procedures: Students read pages B14 – B19 in <u>Destinations in Science</u>. Whole class discussion of features specific to certain biomes, including amount of precipitation, temperature, amount of sunlight, and soil type.</p> <p>Cooperative groups brainstorm how conditions at the top of a mountain might be different from conditions at the base of a mountain. Be prepared to explain ideas (example – fewer plants on top because of colder temperature).</p> <p>Whole class discussion of brainstorming ideas.</p> <p>Students write and answer the following question in the science journal – “What are the factors that determine the conditions of a particular biome?”</p>	<p>Resources: <u>Destinations in Science</u> textbook</p>
	<p>Assessment: (List assessments used to ensure student learning)</p> <p>Oral assessment of ideas and answer to journal question.</p>
	<p>Marzano Strategies:</p> <p>Cooperative learning</p>
	<p>Integrated Technologies:</p>
	<p>Writing Component:</p> <p>Journal writing</p>
	<p>Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>

LESSON PLAN FORM 6 Date(s)/Duration _____

Unit Title: Outdoor Survivors

Essential Question: #1

Targeted Standard(s): 2.1, 2.5 and 2.6

Major Content: SC-M-2.1.4

<p>Key Vocabulary: Predict temperature centimeter Grow light</p> <p>Objective: To predict how temperature effects the number of seeds that germinate.</p> <p>Activity/Procedures: Students conduct experiment “Soil Temperature” following the directions for 2 weeks.</p> <p>After the set time download the graphs from the data loggers. Compare the graphs with the number of seeds that germinated per tray. Discuss why different temperatures may have caused different germination times for seeds. Ask “What would be the best condition for growing plants?”</p>	<p>Resources: 3 trays soil radish seeds data loggers grow light</p>
	<p>Assessment: (List assessments used to ensure student learning)</p>
	<p>Marzano Strategies: Nonlinguistic representation</p>
	<p>Integrated Technologies: Data loggers</p>
	<p>Writing Component:</p>
	<p>Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>

LESSON PLAN FORM 7 Date(s)/Duration _____

Unit Title: Outdoor Survivors

Essential Question: #1 and #2

Targeted Standard(s): 2.1, 2.5. and 2.6

Major Content: SC-M-2.1.5

<p>Key Vocabulary: Water purity constant variable</p> <p>Objective: To determine if water purity effects plant growth.</p> <p>Activity/Procedures: Choose 3 similar plants to be used as variables and a constant for an experiment about water quality.</p> <p>Each plant will need to be the same type, size, and be moistened at the same time and with the same amount of liquid for two weeks.</p> <p>One plant will be moistened with plain water. This is to be the constant.</p> <p>One plant will be moistened with a salt water solution to simulate ocean water.</p> <p>One plant will be moistened with a vinegar water solution to simulate acid rain.</p> <p>Each day students will observe the 3 plants and write any changes they see between the plants (color, wilting, etc.). At the end of the two week period have students write a description in their journals of which type of liquid produced the healthiest plant and why.</p>	<p>Resources: 3 similar plants water salt water vinegar water</p>
	<p>Assessment: (List assessments used to ensure student learning)</p>
	<p>Marzano Strategies:</p>
	<p>Integrated Technologies:</p>
	<p>Writing Component: Journal writing</p>
	<p>Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>Modifications/Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO</p>	

LESSON PLAN FORM 8

Date(s)/Duration _____

Unit Title: Outdoor Survivors

Essential Question: #1 and #2

Targeted Standard(s): 2.1, 2.5, and 2.6

Major Content: SC-M-2.1.4 SC-M-2.1.5

<p>Key Vocabulary: Topsoil</p> <p>Objective: To determine which topsoil holds the most water and which is best for most plants.</p> <p>Activity/Procedures: Students will conduct the activity "Which Topsoil Holds the Most Water?"</p>	Resources:
	Assessment: (List assessments used to ensure student learning)
	Marzano Strategies:
	Integrated Technologies:
	Writing Component:
	Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO
	Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO

LESSON PLAN FORM

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Date(s)/Duration _____

Unit Title: Outdoor Survivors

Essential Question: #1 and #2

Targeted Standard(s): 2.1, 2.5, and 2.6

Major Content: Sc-M-3.5.3

<p>Key Vocabulary: Sunlight</p> <p>Objective: To explore how light effects a plants' leaves.</p> <p>Activity/Procedures: Students conduct the activity "What Does Light Do For a Plant?"</p>	Resources:
	Assessment: (List assessments used to ensure student learning)
	Marzano Strategies:
	Integrated Technologies:
	Writing Component:
	Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO
	Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO

LESSON PLAN FORM

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Date(s)/Duration _____

Unit Title: Outdoor Survivors

Essential Question: #1 and #2

Targeted Standard(s): 2.1, 2.5, and 2.6

Major Content: SC-M-2.1.5

Key Vocabulary: Objective: To explore how different amounts of water effect plants. Activity/Procedures: Students conduct the activity "Do Seeds Need Water?"	Resources:
	Assessment: (List assessments used to ensure student learning)
	Marzano Strategies:
	Integrated Technologies:
	Writing Component:
	Scoring Guide: <input type="checkbox"/> YES <input type="checkbox"/> NO
	Modifications/ Extensions: <input type="checkbox"/> YES <input type="checkbox"/> NO