# Key Concepts & Goals

<table>
<thead>
<tr>
<th>Concept</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Academic Achievement</strong></td>
<td>Enrich student learning by providing comprehensive interdisciplinary garden-based lessons that foster lifelong learning.</td>
</tr>
<tr>
<td><strong>Environmental Stewardship</strong></td>
<td>Enhance environmental knowledge by providing opportunities for students to appreciate, interact and reconnect with nature.</td>
</tr>
<tr>
<td><strong>Healthy and Sustainable Living</strong></td>
<td>Encourage healthier lifestyles, specifically through nutrition education and edible gardening, by teaching students where vegetables and fruits come from.</td>
</tr>
<tr>
<td><strong>Community and Social Development</strong></td>
<td>Expand student ownership by building a sense of community through involvement and teamwork in garden-based learning activities and horticultural displays.</td>
</tr>
</tbody>
</table>
# Garden Groundbreakers

## Enrichment Curriculum

### Sixth Grade

**2018-2019**

**Key Concept** | **Goal**
--- | ---
Academic Achievement | Enrich student learning by providing comprehensive interdisciplinary garden-based lessons that foster lifelong learning.
Environmental Stewardship | Enhance environmental knowledge by providing opportunities for students to appreciate, interact and reconnect with nature.
Healthy and Sustainable Living | Encourage healthier lifestyles, specifically through nutrition education and edible gardening, by teaching students where vegetables and fruits come from.
Community and Social Development | Expand student ownership by building a sense of community through involvement and teamwork in garden-based learning activities and horticultural displays.

## Lesson Design (60 minutes)

<table>
<thead>
<tr>
<th>Description</th>
<th>Lesson Design (60 minutes)</th>
<th>Standards, Methods &amp; Models</th>
</tr>
</thead>
</table>
| **Lesson rotations** | **Institution (15 minutes)** | • Oklahoma Academic Standards  
• STEM/STEAM |
|  o John Rex Middle School has four sixth grade classes. |  o Anticipatory Set  
  o Input & Modeling  
  o Check for Understanding  | • Bloom’s Revised Taxonomy Model  
• Instructional Theory Into Practice  
• Madeline Hunter Lesson Design |
|  o Each Wednesday one class will participate in the lesson. |  o Kinesthetic Activity (30 minutes)  
  o Guided Practice  
  o Independent Practice  | • Explicit Instruction: Effective & Efficient Teaching  
• Gradual Release of Responsibility Model (“I do, we do, you do”)  
• The Science of Classroom Design |
|  o Each lesson will repeat until completed by all four classes. |  o Instruction (15 minutes)  
  o Review  
  o Closure  | • Gardner’s Theory of Multiple Intelligences  
• Maslow’s Hierarchy of Needs |
| **Classroom spaces** |  |  |
|  o Crystal Bridge: Second Floor Conference Room |  |  |
|  o Visitor Center: The Garden Classroom |  |  |
|  o Children’s Garden: Gathering Porch |  |  |
|  o East Lower Lake: Stone Terrace |  |  |
|  o Water Stage Amphitheater |  |  |

## September 26 – Pumpkin Dissection

**Goal**

- Identify native plants.
- Assess the value of healthy and sustainable living.
- Explain the importance of water to sustain plants and life.
- Explain the importance of soil to sustain plants and life.
- Explain the significance of pollinators.
- Identify the steps for properly planting seeds.
- Demonstrate proper bulb planting.
- Distinguish trees by identifiable features.
- Appreciate, interact and reconnect with nature.
- Enhance environmental knowledge by providing opportunities for students to appreciate, interact and reconnect with nature.

**Inquiry-Based Approach**

- Gardner’s Theory of Multiple Intelligences
- The Science of Classroom Design
- Gradual Release of Responsibility Model (“I do, we do, you do”)
- STEM/STEAM
- Oklahoma Academic Standards
- Bloom’s Revised Taxonomy Model
- Instructional Theory Into Practice
- Madeline Hunter Lesson Design
- Explicit Instruction: Effective & Efficient Teaching
- The Science of Classroom Design
- Gardner’s Theory of Multiple Intelligences
- Maslow’s Hierarchy of Needs

**Standards, Methods & Models**

- Oklahoma Academic Standards
- STEM/STEAM
- Bloom’s Revised Taxonomy Model
- Instructional Theory Into Practice
- Madeline Hunter Lesson Design
- Explicit Instruction: Effective & Efficient Teaching
- Gradual Release of Responsibility Model (“I do, we do, you do”)
- The Science of Classroom Design
- Gardner’s Theory of Multiple Intelligences
- Maslow’s Hierarchy of Needs

**Pacing**

- August 15, 22, 29, September 5
- September 12, 19, October 3, 10
- October 24, 31, November 7, 14
- November 28, December 5, 12, 19
- December 23, January 9, 23, 30,
- January 29, February 5, 12, 19
- February 26, March 27, April 24, May 1, May 8
- May 13, June 6, 13, 20
- June 27

**Outdoor Location**

- Children’s Garden, Children’s Garden, Crystal Bridge Conservatory, and West Plaza Area
- Children’s Garden, Oklahoma Prairie Garden, and Sheridan Lawn
- Children’s Garden, Oklahoma Prairie Garden, and Sheridan Lawn
- Children’s Garden, Park House Event Center, and Seasonal Plaza
- Children’s Garden, Color Curve, The Devon Lawn
- Oklahoma Prairie Garden
- Children’s Garden, Waterwise Gardens in the Arena Plaza
- Children’s Garden, Park House Event Center, and Seasonal Plaza
- Children’s Garden, Color Curve, The Devon Lawn
- Oklahoma Prairie Garden

**Resource**

- Gardener’s Theory of Multiple Intelligences
- The Science of Classroom Design
- Gradual Release of Responsibility Model (“I do, we do, you do”)
- STEM/STEAM
- Oklahoma Academic Standards
- Bloom’s Revised Taxonomy Model
- Instructional Theory Into Practice
- Madeline Hunter Lesson Design
- Explicit Instruction: Effective & Efficient Teaching
- Gradual Release of Responsibility Model (“I do, we do, you do”)
- The Science of Classroom Design
- Gardner’s Theory of Multiple Intelligences
- Maslow’s Hierarchy of Needs

**Supplies**

- Specimen of soil types, products to be composted, shovels and rakes
- Specimen of a bulb and flowers, bulbs, gloves, trowel
- Specimens of pollinators, calculators, tape measures
- Asparagus, heirloom seeds, soil mix, labels, peat pots, row cover
- Sycamore, art supplies and identifiable parts of trees
- Sapling, urban, rural, biosphere
- Art supplies and identifiable parts of trees

**Classroom spaces**

- Crystal Bridge: Second Floor Conference Room
- Visitor Center: The Garden Classroom
- Children’s Garden: Gathering Porch
- East Lower Lake: Stone Terrace
- Water Stage Amphitheater

**September 26 – Pumpkin Dissection**

**May 21 – End of the Year Celebration**

- Discovery Adventure
- Tulip Bulb Planting
- Interactive Soil Quest
- Water Resource Excursion
- Indoor and Outdoor Seeding Starting
- Illustration Sensory Stroll
- Meinders Garden, Sheridan Lawn, and Tanenbaum Reflection Garden
- Children’s Garden, Children’s Garden, Color Curve, The Devon Lawn
- Children’s Garden, Crystal Bridge Conservatory, and West Plaza Area
- Children’s Garden, Oklahoma Prairie Garden, and Sheridan Lawn
- Children’s Garden, Park House Event Center, and Seasonal Plaza
- Oklahoma Prairie Garden

**Sensory Stroll**

- Discovery Adventure
- Tulip Bulb Planting
- Interactive Soil Quest
- Water Resource Excursion
- Indoor and Outdoor Seeding Starting
- Illustration Sensory Stroll
- Meinders Garden, Sheridan Lawn, and Tanenbaum Reflection Garden
- Children’s Garden, Children’s Garden, Color Curve, The Devon Lawn
- Children’s Garden, Crystal Bridge Conservatory, and West Plaza Area
- Children’s Garden, Oklahoma Prairie Garden, and Sheridan Lawn
- Children’s Garden, Park House Event Center, and Seasonal Plaza
- Oklahoma Prairie Garden

**State Standards**

- Oklahoma Academic Standards
- STEM/STEAM
- Bloom’s Revised Taxonomy Model
- Instructional Theory Into Practice
- Madeline Hunter Lesson Design
- Explicit Instruction: Effective & Efficient Teaching
- Gradual Release of Responsibility Model (“I do, we do, you do”)
- The Science of Classroom Design
- Gardner’s Theory of Multiple Intelligences
- Maslow’s Hierarchy of Needs
### Supported Standards

<table>
<thead>
<tr>
<th>Lesson</th>
<th>Oklahoma Academic Standards – Sixth Grade unless otherwise noted.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Native Plants</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td></td>
<td>• MS-LS2-4 Ecosystems: Interactions, Energy, and Dynamics</td>
</tr>
<tr>
<td></td>
<td>o Ecosystem Dynamics, Functioning, and Resilience: Ecosystems are dynamic in nature; their characteristics can vary over time.</td>
</tr>
<tr>
<td></td>
<td>• MS-LS2-5 Ecosystems: Interactions, Energy, and Dynamics</td>
</tr>
<tr>
<td></td>
<td>o Ecosystem Dynamics, Functioning, and Resilience: Biodiversity describes the variety of species found in Earth’s terrestrial and oceanic ecosystems.</td>
</tr>
<tr>
<td><strong>Pollinators</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td></td>
<td>• MS-LS1-4 From Molecules to Organisms: Structure and Processes (Seventh Grade)</td>
</tr>
<tr>
<td></td>
<td>o Growth and Development of Organisms: Plants reproduce in a variety of ways, sometimes depending on animal behavior and specialized features for reproduction.</td>
</tr>
<tr>
<td></td>
<td>• MS-LS2-2 Ecosystems: Interactions, Energy, and Dynamics</td>
</tr>
<tr>
<td></td>
<td>o Interdependent Relationships in Ecosystems: Predatory interactions may reduce the number of organisms or eliminate whole populations of organisms. Mutually beneficial interactions, in contrast, may become so interdependent that each organism requires the other for survival. Although the species involved in these competitive, predatory, and mutually beneficial interactions vary across ecosystems, the patterns of interactions of organisms with their environments, both living and nonliving, are shared.</td>
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<tr>
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<td>• MS-LS2-4 Ecosystems: Interactions, Energy, and Dynamics</td>
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<td></td>
<td>o Ecosystem Dynamics, Functioning, and Resilience: Ecosystems are dynamic in nature; their characteristics can vary over time.</td>
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<tr>
<td></td>
<td>o Disruptions to any physical or biological component of an ecosystem can lead to shifts in all its populations.</td>
</tr>
<tr>
<td><strong>Mathematics</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td></td>
<td>• Data &amp; Probability</td>
</tr>
<tr>
<td></td>
<td>o 6.D.1 Display and analyze data.</td>
</tr>
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<td></td>
<td>• Geometry &amp; Measurement</td>
</tr>
<tr>
<td></td>
<td>o 6.GM.1 Calculate area solve real-world and mathematical problems.</td>
</tr>
<tr>
<td></td>
<td>o 6.GM.3 Choose appropriate units of measurement and use ratios to convert within measurement systems to solve real-world and mathematical problems.</td>
</tr>
<tr>
<td><strong>Plants</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td></td>
<td>• MS-LS1-1 From Molecules to Organisms: Structure and Processes</td>
</tr>
<tr>
<td></td>
<td>o Structure and Function: All living things are made up of cells, which is the smallest unit that can be said to be alive.</td>
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<tr>
<td></td>
<td>• MS-LS1-5 From Molecules to Organisms: Structure and Processes (Seventh Grade)</td>
</tr>
<tr>
<td></td>
<td>o Growth and Development of Organisms: Genetic factors as well as local conditions affect the growth of the plant.</td>
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<td>• MS-LS1-6 From Molecules to Organisms: Structure and Processes</td>
</tr>
<tr>
<td></td>
<td>o Organization for Matter and Energy Flow in Organisms: Plants, algae, and many microorganisms use the energy from light to make sugars (food) from carbon dioxide from the atmosphere and water through the process of photosynthesis, which also releases oxygen. These sugars can be used immediately or stored for growth or later use.</td>
</tr>
<tr>
<td><strong>Soil</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td></td>
<td>• MS-LS2-3 Ecosystems: Interactions, Energy, and Dynamics</td>
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<tr>
<td></td>
<td>o Cycle of Matter and Energy Transfer in Ecosystems: Decomposers recycle nutrients from dead plants back to the soil in terrestrial environments or to the water in aquatic environments.</td>
</tr>
<tr>
<td></td>
<td>• MS-ESS2-2 Earth’s Systems (Eighth Grade)</td>
</tr>
<tr>
<td></td>
<td>o The Roles of Water in Earth’s Surface Processes: Water’s movements—on both the land and underground—cause weathering and erosion, which change the land’s surface features and create underground formations.</td>
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<tr>
<td><strong>Social Studies</strong></td>
<td><strong>Science</strong></td>
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<td></td>
<td>• History Literacy Content Standard 4: The student will analyze the significant events and historic personalities contributing to the development of the state of Oklahoma.</td>
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<td></td>
<td>o Summarize how the weather and the environment affected Oklahoma in events like the Dust Bowl.</td>
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<tr>
<td><strong>Water</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td></td>
<td>• MS-PS1-4 Matter and Its Interactions</td>
</tr>
<tr>
<td></td>
<td>o Structure and Properties of Matter: The changes of state that occur with variations in temperature or pressure can be described and predicted using these models of matter.</td>
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<tr>
<td></td>
<td>o Crosscutting Concepts: Cause and Effect: Cause and effect relationships may be used to predict phenomena in natural or designed systems.</td>
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<tr>
<td></td>
<td>• MS-ESS1-1 Earth’s Place in the Universe (Seventh Grade)</td>
</tr>
<tr>
<td></td>
<td>o Earth and the Solar System: The seasons are a result of that tilt and are caused by the differential intensity of sunlight on different areas of Earth across the year.</td>
</tr>
<tr>
<td></td>
<td>• MS-ESS2-4 Earth’s Systems</td>
</tr>
</tbody>
</table>

Developed by Joel Bramhall, Director of Education, Myriad Gardens Foundation
- The Roles of Water in Earth’s Surface Processes: Water continually cycles among land, ocean, and atmosphere via transpiration, evaporation, condensation and crystallization, and precipitation, as well as downhill flows on land.
  - MS-ESS2-5 Earth’s Systems (Seventh Grade)
    - Weather and Climate: Because these patterns are so complex, weather can only be predicted probabilistically.
  - MS-PS3-4 Energy
    - Definitions of Energy: Temperature is a measure of the average kinetic energy of particles of matter.

**English Language Arts**
- Informative
  - 6.3.W.2 Students will compose essays and reports about topics, incorporating evidence (e.g., specific facts, examples, details) and maintaining an organized structure.

**Seed Science**
- MS-LS1-5 From Molecules to Organisms: Structure and Processes (Seventh Grade)
  - Growth and Development of Organisms: Genetic factors as well as local conditions affect the growth of the plant.
- MS-LS2-5 Ecosystems: Interactions, Energy, and Dynamics
  - Ecosystem Dynamics, Functioning, and Resilience: Biodiversity describes the variety of species found in Earth’s terrestrial and oceanic ecosystems.
- MS-LS3-1 Heredity: Inheritance and Variation of Traits (Seventh Grade)
  - Variation of Traits: Some changes are beneficial, others harmful, and some neutral to the organism.

**Mathematics**
- Geometry & Measurement
  - 6.GM.3 Choose appropriate units of measurement and use ratios to convert within measurement systems to solve real-world and mathematical problems.

**Trees Science**
- MS-LS2-1 Ecosystems: Interactions, Energy, and Dynamics
  - Interdependent Relationships in Ecosystems: Organisms, and populations of organisms, are dependent on their environmental interactions both with other living things and with nonliving factors.

**Visual Arts**
- Standard 3: Visual Art Expression: “Creating”
  - The student will observe, select, and utilize a variety of ideas and subject matter in creating original works of art.
- Standard 4: Visual Art Appreciation: “Connecting”
  - The student will appreciate and utilize visual art to make interdisciplinary connections and informed aesthetic decisions.

**Healthy Living Science**
- MS-ESS3-3 Earth and Human Activity
  - Human Impacts on Earth Systems: Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth’s environments can have different impacts (negative and positive) for different living things.
- MS-ESS3-4 Earth and Human Activity (Eighth Grade)
  - Human Impacts on Earth Systems: Typically as human populations and per-capita consumption of natural resources increase, so do the negative effects on Earth, unless the activities and technologies involved are engineered otherwise.
- MS-LS2-5 Ecosystems: Interactions, Energy, and Dynamics
  - Ecosystem Dynamics, Functioning, and Resilience: The completeness or integrity of an ecosystem’s biodiversity is often used as a measure of its health.
  - Biodiversity and Humans: Changes in biodiversity can influence humans’ resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on—for example, water purification and recycling.
  - Influence of Engineering, Technology, and Science on Society and the Natural World: The use of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus, technology use varies by region and over time.

**Health/Safety (Grades 6-8)**
- Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.
  - 1.8.3 Analyze how the environment affects personal health.
- Standard 3: Students will demonstrate the ability to access valid information, products and services to enhance health.
  - 3.8.3 Determine the accessibility of products that enhance health.
- Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.
  - 5.8.4 Distinguish between healthy and unhealthy alternatives of health related decisions.
<table>
<thead>
<tr>
<th>Lesson</th>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Plants</td>
<td>prairie</td>
<td>a large open area of land made up of grasses, flowers, small shrubs, and few trees</td>
</tr>
<tr>
<td></td>
<td>native plant</td>
<td>a plant that has developed over thousands of years in a particular region</td>
</tr>
<tr>
<td></td>
<td>root system</td>
<td>a part of a plant that is usually hidden underground and absorbs water and food from the soil</td>
</tr>
<tr>
<td></td>
<td>ecosystem</td>
<td>all the living things in a given place</td>
</tr>
<tr>
<td>Pollinators</td>
<td>pollen</td>
<td>powdery seed dust on flowers</td>
</tr>
<tr>
<td></td>
<td>nectar</td>
<td>the energy-packed sugar liquid flowers produce</td>
</tr>
<tr>
<td></td>
<td>pollination</td>
<td>the process by which pollen is carried by insects or blown by the wind from one flower to another</td>
</tr>
<tr>
<td></td>
<td>pollinator</td>
<td>an animal that causes plants to make fruit or seeds</td>
</tr>
<tr>
<td></td>
<td>migration</td>
<td>seasonal movement from one region to another</td>
</tr>
<tr>
<td>Plants</td>
<td>botany</td>
<td>the study of plants</td>
</tr>
<tr>
<td></td>
<td>garden</td>
<td>a piece of ground used for growing plants</td>
</tr>
<tr>
<td></td>
<td>annual</td>
<td>a plant that completes its life cycle in one year</td>
</tr>
<tr>
<td></td>
<td>biennial</td>
<td>a plant that lives for two years</td>
</tr>
<tr>
<td></td>
<td>perennial</td>
<td>a plant that lives more than two years</td>
</tr>
<tr>
<td>Soil</td>
<td>soil</td>
<td>a mixture of organic matter, minerals, gases, liquids, and organisms that together support life</td>
</tr>
<tr>
<td></td>
<td>nutrient</td>
<td>a substance that provides nourishment for plants</td>
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<tr>
<td></td>
<td>mulch</td>
<td>a material (as straw or bark) spread over the ground especially to protect the roots of plants from heat or cold, to keep soil moist, and to control weeds</td>
</tr>
<tr>
<td></td>
<td>compost</td>
<td>decayed organic material (as of leaves and grass) used to improve soil especially for growing crops</td>
</tr>
<tr>
<td></td>
<td>stewardship</td>
<td>responsible use and protection of the natural environment</td>
</tr>
<tr>
<td>Water</td>
<td>water</td>
<td>a colorless, transparent, odorless, tasteless liquid that forms the seas, lakes, rivers, and rain and is the basis of the fluids of living organisms</td>
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<tr>
<td></td>
<td>irrigation</td>
<td>the supply of water to land or crops to help growth</td>
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<tr>
<td></td>
<td>water cycle</td>
<td>the way that water moves between being water vapor to liquid water and then back to water vapor</td>
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<tr>
<td></td>
<td>conservation</td>
<td>preservation, protection, or restoration of the natural environment, natural ecosystems, vegetation, and wildlife</td>
</tr>
<tr>
<td>Seed</td>
<td>seed</td>
<td>a flowering plant's unit of reproduction, capable of developing into another such plant</td>
</tr>
<tr>
<td></td>
<td>cotyledon</td>
<td>the first leaf or set of leaves that sprout from a seed</td>
</tr>
<tr>
<td></td>
<td>germination</td>
<td>the process by which a plant grows from a seed</td>
</tr>
<tr>
<td></td>
<td>agriculture</td>
<td>the science or practice of farming</td>
</tr>
<tr>
<td>Trees</td>
<td>sapling</td>
<td>a young tree</td>
</tr>
<tr>
<td></td>
<td>urban</td>
<td>a city or town</td>
</tr>
<tr>
<td></td>
<td>rural</td>
<td>the countryside</td>
</tr>
<tr>
<td></td>
<td>biosphere</td>
<td>regions of the Earth</td>
</tr>
<tr>
<td>Healthy Living</td>
<td>harvest</td>
<td>the process or period of gathering in crops</td>
</tr>
<tr>
<td></td>
<td>crop</td>
<td>a plant that is grown as food, especially a grain, fruit, or vegetable</td>
</tr>
<tr>
<td></td>
<td>sustainable living</td>
<td>a lifestyle that attempts to reduce an individual’s or society’s use of the Earth’s natural resources</td>
</tr>
<tr>
<td></td>
<td>nutrition</td>
<td>the process by which the body nourishes itself by transforming food into energy and body tissues</td>
</tr>
<tr>
<td>Lesson</td>
<td>Lesson Dates</td>
<td>Corresponding Celebration</td>
</tr>
<tr>
<td>-----------</td>
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<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Native Plants</td>
<td>August 15, 22, 29, September 5</td>
<td>National Honey Bee Day</td>
</tr>
<tr>
<td>Pollinators</td>
<td>September 12, 19, October 3, 10</td>
<td>Monarch butterfly migration</td>
</tr>
<tr>
<td>Plants</td>
<td>October 24, 31, November 7, 14</td>
<td>Oklahoma Statehood</td>
</tr>
<tr>
<td>Soil</td>
<td>November 28, December 5, 12, 19</td>
<td>World Soil Day</td>
</tr>
<tr>
<td>Water</td>
<td>January 9, 16, 23, 30</td>
<td>World Water Day</td>
</tr>
<tr>
<td>Seed</td>
<td>February 6, 13, 20, 27</td>
<td>National Seed Swap Day and The Great American Seed Starting Day</td>
</tr>
<tr>
<td>Trees</td>
<td>March 6, 13, 27, April 24</td>
<td>Arbor Day and Earth Day</td>
</tr>
<tr>
<td>Healthy Living</td>
<td>May 1, 8, 15, 22</td>
<td>National Public Gardens Day</td>
</tr>
</tbody>
</table>
EXAMPLE: OVERVIEW OF A LESSON

Lesson
Native Plants

Dates
August 15, 22, 29, September 5

Key Concept:
Academic Achievement; Environmental Stewardship

Objective
The learner will identify native plants.

Hands-On Activity
discovery adventure

Location for Hands-On Activity
Oklahoma Prairie Garden

Essential Vocabulary
prairie, native plant, root system, ecosystem

Inquiry-Based Approach
Why are native plants beneficial?

Corresponding Environmental Celebration
National Honey Bee Day is August 22, 2018

Supported Oklahoma Academic Standards

Science
- MS-LS2-4 Ecosystems: Interactions, Energy, and Dynamics
  - Ecosystem Dynamics, Functioning, and Resilience: Ecosystems are dynamic in nature; their characteristics can vary over time.
- MS-LS2-5 Ecosystems: Interactions, Energy, and Dynamics
  - Ecosystem Dynamics, Functioning, and Resilience: Biodiversity describes the variety of species found in Earth’s terrestrial and oceanic ecosystems.
EXAMPLE LESSON PLAN

Lesson 1: Native Plants

Location: Crystal Bridge Second Floor Conference Room; Oklahoma Prairie Garden

Key Concepts: Academic Achievement; Environmental Stewardship

Objective: The learner will identify native plants.

Hands-On Activity: Discovery Adventure

Introduction
- Meet and greet students
  - East entrance of the McGee Education Center
- Proceed to CB 2nd Floor Conference Room
  - Pre-assessment

Anticipatory Set
- Photos and specimens of native plants

Input & Modeling
- Presentation with handout
  - Explicit instruction of essential vocabulary
  - Student-centered participation
  - Check for understanding
    - Pair/share
    - Hand signals
    - Choral response

Guided Practice
- Directives for the Discovery Adventure

Guided & Independent Practice
- Discovery adventure in the Oklahoma Prairie Garden

Closure
- Collect handouts
- Quizlet review
- Post-assessment