<table>
<thead>
<tr>
<th>Grade level: 1</th>
<th>Course Title: Science</th>
<th>Topic/Concept: Life Cycle of the Butterfly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Allotment: 2 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Sequence: 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Major Concepts to be learned:**

1. The Life Cycle of the Monarch Butterfly
2. Migration of the Monarch Butterfly to Mexico

**Expected Skills to be demonstrated:**

1. Parts of the Butterfly
2. The Life Cycle of the Butterfly
3. Migration
4. Butterflies need for survival
5. Food chain
6. Habitat

<table>
<thead>
<tr>
<th>PA Standards/Anchors:</th>
<th>Eligible Content:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 A</td>
<td>4.6 A</td>
</tr>
<tr>
<td>3.3 A-C</td>
<td>4.7 A</td>
</tr>
<tr>
<td>4.3 A</td>
<td></td>
</tr>
</tbody>
</table>

**Instructional Strategies:**

- Observing a real caterpillar as it changes into a butterfly
- Read alouds
- Classroom discussions
- Sequencing butterfly’s life cycle

**Assessments:**

- Teacher observation
- Student participation
<table>
<thead>
<tr>
<th>Grade level: 1</th>
<th>Course Title: Science</th>
<th>Topic/Concept: Trees and Plants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Allotment: 4 weeks</td>
<td></td>
<td>Unit Sequence: 2</td>
</tr>
</tbody>
</table>

**Major Concepts to be learned:**

1. Parts of a tree and plant
2. Needs of a tree and plant
3. Life Cycle of a tree and plant
4. Seasonal changes of a tree and plant
5. Life patterns of a tree and plant
6. Living and nonliving things

**Expected Skills to be demonstrated:**

1. Identifying the 4 main parts of a tree (roots, leaves, trunk, flower)
2. Trees and plants need water, soil, and sunlight to survive
3. Observing the life cycle
4. Identify local plants and animals

**PA Standards/Anchors:**

<table>
<thead>
<tr>
<th>3.1 C, D, E</th>
<th>3.5 B</th>
<th>4.6 A</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.2 B</td>
<td>4.2 A-D</td>
<td>4.7 A</td>
</tr>
<tr>
<td>3.3 A-B, D</td>
<td>4.3 A</td>
<td>4.8 C</td>
</tr>
</tbody>
</table>

**Eligible Content:**

- The students will use information presented to have a better understanding of the importance of trees and plants.

**Instructional Strategies:**

- Read Alouds
- Classroom discussions
- Observations

**Assessments:**

- Teacher Observation
- Student participation
**Grade level:** 1  
**Course Title:** Science  
**Topic/Concept:** Weather  
**Time Allotment:** 4 weeks  
**Unit Sequence:** 3

**Major Concepts to be learned:**

1. Recognize change in natural and physical systems  
2. The Five Senses  
3. Identify types of clouds  
4. The Seasons

**Expected Skills to be demonstrated:**

1. Read a thermometer and use other weather instruments.  
2. Identify the change of seasons.  
3. Identifying and observing types of clouds.  
4. Recording types of weather  
5. Types of precipitation

**PA Standards/Anchors:**

<table>
<thead>
<tr>
<th>PA Standards/Anchors</th>
<th>Eligible Content:</th>
</tr>
</thead>
</table>
| 3.1 B, E  
3.2 B  
3.5 C, D | 3.7 A-B  
4.1 B | • The students will use the information presented to have a better understanding of effects of weather.

**Instructional Strategies:**

- Read Alouds  
- Classroom discussions  
- Observations

**Assessments:**

- Teacher Observation  
- Student participation
Grade level: 1
Course Title: Science
Topic/Concept: Matter

Time Allotment: 4 weeks
Unit Sequence: 4

Major Concepts to be learned:

1. Properties of Matter (solid, liquids, and gases)
2. Changes of Matter
3. How mixtures are formed

Expected Skills to be demonstrated:

1. Identify changes and types of Matter
2. Make a mixture
3. Understand the use of energy to change Matter.
4. Understand forces repell and attract.

PA Standards/Anchors:

3.2 A-C
3.4 A-C

Eligible Content:

- The students will use the information presented to observe and identify the three states of Matter.

Instructional Strategies:

Read Alouds
Classroom discussions
Observations
Experiments
Demonstrations

Assessments:

- Teacher Observation
- Student participation
Grade level: 1
Course Title: Science
Topic/Concept: Agriculture

Time Allotment: 2 weeks

Unit Sequence: 5

Major Concepts to be learned:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The importance of agriculture to humans</td>
</tr>
<tr>
<td>2.</td>
<td>Pennsylvania farm life</td>
</tr>
</tbody>
</table>

Expected Skills to be demonstrated:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identify products from PA farms.</td>
</tr>
<tr>
<td>2.</td>
<td>Identify animals and plants on a PA farm.</td>
</tr>
<tr>
<td>3.</td>
<td>Identify crops grown on a PA farm.</td>
</tr>
<tr>
<td>4.</td>
<td>Identify what plants, animals, human need to survive (dependance on agriculture).</td>
</tr>
<tr>
<td>5.</td>
<td>Explain pest control and why we need pest management.</td>
</tr>
<tr>
<td>6.</td>
<td>Know types pests on a home and a farm.</td>
</tr>
<tr>
<td>7.</td>
<td>Identify common soil textures.</td>
</tr>
</tbody>
</table>

PA Standards/Anchors:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4 A-B</td>
<td>4.7 B</td>
</tr>
<tr>
<td>4.5 A-C</td>
<td></td>
</tr>
<tr>
<td>4.6 A</td>
<td></td>
</tr>
</tbody>
</table>

Eligible Content:

- The students will use the information presented to know the importance of Pennsylvania agriculture in daily life.

Instructional Strategies:

- Read Alouds
- Classroom discussions
- Guest speaker

Assessments:

- Teacher Observation
- Student participation
Grade level: 1
Course Title: Science
Topic/Concept: Water Environments
Time Allotment: 4 weeks
Unit Sequence: 6

Major Concepts to be learned:
1. Ecosystems
2. Different kinds of water environments

Expected Skills to be demonstrated:
1. Identify living and nonliving things found in specific water habitats.
2. Difference of water environments (ponds, wetlands, swamps, rivers, creeks, oceans)
3. Seasonal changes of various water environments and the effects on the animals living there.

PA Standards/Anchors:

<table>
<thead>
<tr>
<th>PA Standard</th>
<th>Anchor</th>
<th>Eligible Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 C</td>
<td>4.1 A-D</td>
<td>The students will use the information provided to know the various water environments.</td>
</tr>
<tr>
<td>3.3 A, C, D</td>
<td>4.3 A,C</td>
<td></td>
</tr>
<tr>
<td>3.5 A</td>
<td>4.6 A</td>
<td></td>
</tr>
</tbody>
</table>

Instructional Strategies:
Read Alouds
Classroom discussions
Walking field trip

Assessments:
• Teacher Observation
• Student participation
Grade level: 1
Course Title: Science
Topic/Concept: Recycling
Time Allotment: 2 weeks
Unit Sequence: 7

Major Concepts to be learned:
1. The importance of recycling
2. The effects of littering on the environment

Expected Skills to be demonstrated:
1. Identify the recycling symbol
2. Know how recycling affects our environment
3. Know the difference between reduce, reuse, and recycle

PA Standards/Anchors:
3.2 D 3.2 D
4.2 D 4.8 A-C
4.3 B

Eligible Content:
• The students will use the information provided to become Earth friendly citizens.

Instructional Strategies:
Read Alouds
Classroom discussions
Classroom participation in school-wide recycling project

Assessments:
• Teacher Observation
• Student participation