Module Descriptions and NGSS Correlations

All modules last 45 minutes in a normal field trip schedule. Each module can be adapted for students from Kindergarten to 5th grade.

Seed to Harvest

Students learn about the life cycle of a plant through dissecting seeds, and then explore plant life cycles in action while planting, tasting, and tending in the Grow Lunch Garden.

Disciplinary Core Ideas:

- Life Science 1.B: Growth and Development of Organisms
  - *How do organisms grow and develop?*
- Life Science 1.A: Structure and Function
  - *How do the structures of organisms enable life's functions?*
- Life Science 2.A: Interdependent Relationships in Ecosystems
  - *How do organisms interact with the living and nonliving environments to obtain matter and energy?*
- Earth Space Science 3.A: Natural Resources
  - *How do humans depend on the earth's resources?*
- Earth Space Science 3.C: Human Impacts on Earth Systems
  - *How do humans change the planet?*

Science and Engineering Practices:

- Developing and Using Models

Plant Parts

Students explore the structure and function of the six plant parts (roots, stems, leaves, flowers, fruit, seeds) and identify foods that come from each part through a scavenger hunt, games, and tasting on the farm.

Disciplinary Core Ideas:

- Life Science 1.A: Structure and Function
  - *How do the structures of organisms enable life's functions?*
- Life Science 1.C: Organization for Matter and Energy Flow in Organisms
  - *How do organisms obtain and use the matter and energy they need to live and grow?*
- Life Science 2.A: Interdependent Relationships in Ecosystems

    - *How do organisms interact with the living and nonliving environments to obtain matter and energy?*
- Earth Space Science 3.A: Natural Resources
    - *How do humans depend on the earth's resources?*
- Earth Space Science 3.C: Human Impacts on Earth Systems
    - *How do humans change the planet?*

Science and Engineering Practices:

- Constructing Explanations and Designing Solutions

Pollination Station

Students investigate the process of pollination, meet pollinators on the farm, and explore why pollinators are so vital to humans and the planet.

Disciplinary Core Ideas:

- Life Science 1.A: Structure and Function
    - *How do the structures of organisms enable life's functions?*
- Life Science 1.B: Growth and Development of Organisms
    - *How do organisms grow and develop?*
- Life Science 2.A: Interdependent Relationships in Ecosystems
    - *How do organisms interact with the living and nonliving environments to obtain matter and energy?*
- Earth Space Science 3.C: Human Impacts on Earth Systems
    - *How do humans change the planet?*

Science and Engineering Practices:

- Developing and Using Models

Soil Investigation

Students investigate the four elements of healthy soil (water, air, minerals, and organic matter), meet the residents of a compost bin, and learn what they can do to reduce their impact on the soil and the planet.

Disciplinary Core Ideas:

- Life Science 2.A: Interdependent Relationships in Ecosystems
    - *How do organisms interact with the living and nonliving environments to obtain matter and energy?*
- Life Science 2.B: Cycles of Matter and Energy Transfer in Ecosystems
    - *How do matter and energy move through an ecosystem?*
- Earth Space Science 3.C: Human Impacts on Earth Systems
    - *How do humans change the planet?*

Science and Engineering Practices:

- Planning and Carrying Out Investigations

Wildlife and the Food Web

Students discover the many players within a healthy food web, including producers, consumers, and decomposers, and recognize that all living things get their energy from the sun.

Disciplinary Core Ideas:

- Life Science 2.A: Interdependent Relationships in Ecosystems
    - *How do organisms interact with the living and nonliving environments to obtain matter and energy?*
- Life Science 2.B: Cycles of Matter and Energy Transfer in Ecosystems
    - *How do matter and energy move through an ecosystem?*
- Life Science 1.C: Organization for Matter and Energy Flow in Organisms
    - *How do organisms obtain and use the matter and energy they need to live and grow?*
- Physical Science 3.D: Energy in Chemical Processes and Everyday Life
    - *How do food and fuel provide energy?*

Science and Engineering Practices:

- Developing and Using Models