

Linking Students with Agriculture

List of New Jersey Department of Education Core Curriculum Content Standards (as of 2002) Which are Reinforced by an Agricultural Education Session at Mackey's Orchard, Belvidere, New Jersey

Grade Groups K-4

Please note – the first number is the instructional area, the second number is the New Jersey Department of Education Core Curriculum Standard and the third number after the colon (:) is the Cumulative Progress Indicator that is also written out. The activity during the Agricultural Educational Session is written in italic.

1. Visual and Performing Arts

(Grades K-4)

1.5:2 Investigate, experience and participate in dance, music, theater and visual arts activities representing various historical periods and world cultures. *Students will view and touch historical agricultural tools, tractors and specialized equipment.*

2. Health and Physical Education

(Grades K-4)

2.2:3 Discuss how family and friends are important throughout life and that relationships require respect for others. *Students will visit a family agricultural enterprise and see the market business in operation with members of the family providing labor.*

3. Language Arts Literacy

(Grades K-4)

3.2:3 Listen for a variety of purposes, such as enjoyment and obtaining information. *During the hayride students will receive agricultural information about growing fruit to be sold in the retail market.*

3.2:6 Develop listening strategies such as asking relevant questions, taking notes, and making predictions, to understand what is heard. *During the hayride students will find answers to questions about agriculture.*

3.3:3 Use writing to extend the experience. *Students are encouraged to write follow up letters to the agricultural operator.*

3.5:2 Demonstrate the ability to gain information from a variety of media. *During the hayride information will be provided by signs and charts displayed.*

4. Mathematics

(Grades K-4)

4.2:1 Discuss, listen, represent, read, and write as vital activities in their learning and use of mathematics. *Problem solving activities on the hayride will require reading and listening.*

4.3:6 Recognize the connections between mathematics and other disciplines, and apply mathematical thinking and problem solving in those areas. *Mathematical problems using agricultural examples are included.*

4.3:7 Recognize the role of mathematics in their daily lives and in society. *The retail market has examples of where mathematics is important to the agricultural business.*

4.5:4 Use a variety of tools to measure mathematical and physical objects in the world around them. *Students will see and use different measures that are used in the packing area and retail market.*

- 4.6:6 Count and perform simple computations with money. *The market includes an opportunity to estimate costs.*
- 4.9:3 Recognize the need for uniform unit of measure. *Students will see different size baskets and other measures in the packing area and retail market.*
- 4.9:6 Understand and incorporate estimation and repeated measures in measurement activities. *Students will see different size baskets and other measures used in the packing area and retail market.*
- 4.10:2 Use personal referents, such as the width of a finger as one centimeter, for estimations with measurement. *Students will see different size baskets and other measures used.*

5. Science

(Grades K-4)

- 5.1:2 Recognize that since the components of a system usually influence one another, a system may not work if a component is missing. *During the hayride students will see growing crops and the process of producing these crops will be explained and shown to them.*
- 5.2:1 State a problem about the natural world in the form of a question. *Experience with growing crops will stimulate the development of problems that can then be researched.*
- 5.3:2 Recognize that scientific ideas and knowledge have come from men and women of all cultures. *Students will see that agriculture is concentrated food production and the crops originated in different countries.*
- 5.4:2 Demonstrate how tools are used to do things better and more easily or to do tasks that could not otherwise be done. *Students will see how agriculture equipment saves hand labor.*
- 5.4:4 Find and report on examples of how technology helps people. *Students will see how agriculture equipment saves labor.*
- 5.5:1 Judge whether estimates, measurements, and computations of quantities are reasonable. *Students will estimate the amounts in a variety of containers.*
- 5.5:2 Use a variety of measuring instruments, emphasizing appropriate units. *Students will see a variety of ways that agricultural products are sold.*
- 5.6:1 Compare and contrast living and nonliving things. *Students will have the opportunity to see and experience living plants.*
- 5.6:2 Determine the basic needs of organisms. *Students will have the opportunity to see and experience living plants.*
- 5.6:4 Show that plants and animals are composed of different parts serving different purposes and working together for the well being of the organisms. *Students will have the opportunity to see and experience living plants.*
- 5.6:6 Group organisms according to the functions they serve in a food chain. *Students will have the opportunity to see and experience different plants.*
- 5.7:1 Recognize the diversity of plants and animals on earth. *Students will have the opportunity so see and experience many different species of living plants.*
- 5.7:3 Recognize that individuals vary within every species. *Students will have the opportunity to see and experience many different species of living plants.*
- 5.7:4 Identify and describe external features of plants and animals that help them survive in varied habitats. *Students will have the opportunity to see and experience growing plants and describe features.*

- 5.12:1 Investigate the interdependence of living things and their environment. *Students will experience how agriculture uses the environment to raise plants for food.*
- 5.12:2 Explain how meeting human requirements affects the environment. *Students will experience how agriculture uses the environment to raise plants for food.*

6. Social Studies (Grades K-4)

- 6.1:4 Give examples of the impact of government policy on their lives. *Students will see the importance of the farm's location to homes, roads and other businesses.*
- 6.4:2 Identify social institutions, such as family, religion, and government, that function to meet individual and group needs. *Students will see how a family business is operated.*
- 6.6:2 Describe the relationship of price to supply and demand. *Students will have pricing of agriculture products explained to them.*
- 6.6:5 Illustrate the balance between economic growth and environmental preservation. *Students will see where this orchard and market is located and its relationship to population.*
- 6.8:2 Discuss the similarities, differences, and interdependencies among rural, suburban, and urban communities. *Students in traveling to the market and orchard will see a variety of communities.*
- 6.9:1 Explain the characteristics of renewable and nonrenewable resources and their distribution, and the role of resources in daily life. *Students will see how growing a crop is a renewable resource.*
- 6.9:2 Explain how people depend on the physical environment and how they modify the environment. *Students will see how the environment has been modified to maximize the growth of plants.*

7. World Languages (Grades K-4)

- 7.2:1 Demonstrate an awareness of culture. *Students will see food is important to different cultures and the celebration of holidays and special occasions.*

8. Cross Content Workplace Readiness (Grades K-4)

- 8.1:5 Identify skills that are transferable from one occupation to another. *Students will see the many tasks performed at the orchard and retail market.*
- 8.2:1 Understand how technological systems function. *Students will see how technology is used in agriculture equipment design.*
- 8.2:2 Select appropriate tools and technology for specific activities. *Students will see how agricultural equipment is designed to perform specialized functions.*
- 8.5:3 Demonstrate principles of safe physical movement. *Students will be required to practice safety and follow safety rules while visiting this agricultural enterprise.*