### Linking Students with Agriculture

### List of New Jersey Department of Education Core Curriculum Content Standards Which are Reinforced by an Agricultural Education Session at Johnson's Corner Farm, Medford, 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 agricultural tools, tractors and specialized equipment.* 

#### 2. Health and Physical Education

#### (Grades K-4)

- 2.1:3 Identify and demonstrate responsible health behaviors for children. *Students will wash hands after petting and feeding animals*.
- 2.1:5 Describe potentially dangerous or threatening situations related to childhood activities, develop personal protections strategies, and cite resources for help. *Students entering the hay or corn maze must adhere to safety rules.*
- 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 business in operation with members of the family providing labor.*
- 2.5:3 Adapt movement skills in relation to objects, other participants and boundaries. During the pumpkin season, *students will walk through a corn/hay maze*.

#### 3. Language Arts Literacy

#### (Grades K-4)

- 3.1:2 Adjust oral communications for different purposes and audiences. *Students will be encouraged to ask questions through the agricultural education session.*
- 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 plants produced on the farm and 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 farm operators and/or write stories about their experiences on the farm.*
- 3.5:2 Demonstrate the ability to gain information from a variety of media. During the hayride and in the animal barnyard area signs and narration will provide information.

# 4. Mathematics

# (Grades K-4)

- 4.1:1 Use discovery-oriented, inquiry-based and problem-center approaches to investigate and understand mathematical content appropriate to early elementary grades. *Temperature and growing seasons are important considerations when growing plants.*
- 4.1:2 Recognize, formulate, and solve problems arising from mathematical situations and everyday experiences. *Math problems that use agricultural examples will be included*.
- 4.1:5 Construct, explain, justify, and apply a variety of problem-solving strategies in both cooperative and independent learning environments. *Problem solving will be done as individuals and as groups*.
- 4.1:6 Verify the correctness and reasonableness of results and interpret them in the contest of the problems being solved. *Follow up questions will be provided to students for summary and recall.*
- 4.2:1 Discuss, listen, represent, read, and write as vital activities in their learning and use of mathematics. *Problem solving activities 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 where mathematics is important to the agricultural business.*
- 4.5:4 Use a variety of tools to measure mathematical and physical object in the world around them. *Students will see and use different measures that are used in the retail market.*
- 4.9:3 Recognize the need for uniform unit of measure. *Students will pick apples, peaches, corn, pumpkins, strawberries, cotton, popcorn and peanuts requiring measures.*
- 4.9:6 Understand and incorporate estimation and repeated measures in measurement activities. *Students will see different size baskets and other measures used.*
- 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 in the retail market*.
- 4.14:1 Explore a variety of puzzles, games, and counting problems. *Students participate in games and encounter problems during each session*.

# 5. Science

# (Grades K-4)

- 5.1:1 Recognize that most things are made up of components that, when assembled, can do things they could not do separately. *Students will see items made from farm products.*
- 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. *Students will see crops growing during the hayride session and the processes involved with growing 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/animals will stimulate the development of problems that would 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 and animals.*
- 5.6:2 Determine the basic needs of organisms. *Students will have the opportunity to see and experience living plants and animals.*
- 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 and animals.*
- 5.6:6 Group organisms according to the functions they serve in a food chain. *Students will have the opportunity to see and experience both plants and animals.*
- 5.7:1 Recognize the diversity of plants and animals on earth. *Students will have the opportunity to see and experience different living plants and animals.*
- 5.7:3 Recognize that individuals vary within every species. *Students will have the opportunity to see and experience different species of living plants and animals.*
- 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, describe and experience living plants and animals.*
- 5.12:1 Investigate the interdependence of living things and their environment. *Students will see how the environment is controlled to benefit of plants and animals.*
- 5.12:2 Explain how meeting human requirements affects the environment. *Students will experience how agriculture uses the environment to raise plants and animals 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.*
- 6.2:4 Evaluate works of aesthetic expression serve as cultural representations. *Students will make crafts as a result of their pumpkin session.*
- 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.*
- 6.6:5 Illustrate the balance between economic growth and environmental preservation. *Students will see where this farm 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 farm 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 and animals*

# 7. World Languages

# (Grades K-4)

7.2:1 Demonstrate an awareness of culture. *Students will see food and other agricultural products are 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 farm and retail market.*
- 8.2:1 Understand how technological systems function. *Students will see how technology is used in agriculture equipment.*
- 8.2:2 Select appropriate tools and technology for specific activities. *Students will see how agricultural equipment is designed to perform specialized functions.*
- 8.3:15 Apply problem-solving skill to original and creative/design projects. *Students will be asked to do various projects.*
- 8.4:3 Work cooperatively with others to accomplish a task. *Students will work as individuals and together in-groups.*
- 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.*
- 8.5:7 Identify and follow safety procedures for laboratory and other hands-on experiences. *Students will be required to practice safety and follow safety rules while visiting this agricultural enterprise.*

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