

Grade Level: Kindergarten

Title: Becoming a Strawberry Farmer (July-October)

Purpose:

To introduce students to the concept of “the farm and farmer” as an essential part of the larger community that provides food.

Subject Area(s) Addressed:

Social Studies, Science, English Language Arts, Mathematics

Common Core/Essential Standards:

Social Studies:

K.G.2.2 Explain ways people use environmental resources to meet basic needs and wants (shelter, food, clothing, etc.).

K.E.1.2 Explain how jobs help people meet their needs and wants.

Science:

K.L.1.2 compare characteristics of living and nonliving things in terms of their

- Structure
- Growth
- Changes
- Movement
- Basic needs

Literacy:

SL.K.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.

SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.

SL.K.6 Speak audibly and express thoughts, feelings, and ideas clearly.

W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

L.K.2d Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

L.K.5a Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.

Math:

K.CC.B.4a When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

K.CC.B.4b Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

K.CC.B.4c Understand that each successive number name refers to a quantity that is one larger.

K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.

K.OA.A.1 Represent addition and subtraction with objects, fingers, mental images, drawings¹, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

Vocabulary:

animals
community
crop
farm
field

plants
plugs
tractor
wants and needs

Materials Provided:

Photographs (see folder “Strawberry Lesson Photographs”, or find your own)
different types of farms
open land
different foods
grocery stores
restaurants
farm stand
a vending machine
Math standards activity questions (see file “K Essential Questions – Math”)

Materials Needed:

large paper for flow map
markers
drawing paper
crayons
pencils

Teaching Strategy:

The first part of this lesson is getting the students engaged through questioning their knowledge. It should be open-ended questions with the teacher guiding the questions, but the students directing the answers. As answers are relevant to the farm, teachers should build on those responses with further questions and elaboration by students. The teacher should model complete sentences and appropriate questions encouraging students to follow his/her example.

Wants and Needs discussion:

What is the difference between needs and wants?

Have students discuss what they need and what they want. Make a class list of needs and wants. (It is commonly believed that man has five basic needs – food, water, shelter, clothing and love; everything else is a want.)

Food discussion:

What is your favorite food?

Show photographs of foods typically enjoyed by children. Where do you get your food? Show photographs of a grocery store, a farm stand, a vending machines, a fast food and other restaurants. Where does the food that is found in the grocery store, vending machine and restaurants come from? Make a list of sources where the class gets its food.

Farm discussion:

What is a farm?

Using drawing paper and crayons, each student, or pair of students, draws a picture of what they think a farmer and a farm look like. Allow students to talk during drawing time to share vocabulary. This is helpful for all students but essential for ESL students. If students are able to label the picture with letters or words they may. Teachers may also provide written narration as students describe their pictures. Students share their ideas in front of the class or using a document camera. At this time, students may compare drawings as to the number of items they have on their farm. (I have 3 cows. You have 5 cows. Together we have 8 cows. You have 2 more cows than me. I have 2 more cows than you.) Students may also put items into categories from their pictures. (**Animals:** cows, sheep, chickens; **Plants:** corn, soy beans, strawberries; **People:** farmer, children, driver). Show photographs of different farmers, farms and open land. Compare the pictures.

What is a crop?

A crop is a plant that is grown. Students should conclude that a farm is an essential part of a larger community that grows plants and animals for food, fiber, fuel, and flowers. Show photographs of real farms and compare them to students' drawings. Name and describe different types of farms. (ex. Dairy = cows, Vegetable = sweetpotatoes, tomatoes, etc.; Fruit – strawberries, apples) What do you see on the farm that defines it as a "farm?" Be sure to note the natural resources the farmer uses that are seen in the pictures (water, soil, sunlight, rain).

Who works on the farm? What specific jobs does each person have to do? What qualifications does a worker need to have to do the job? Jobs may include ordering plants and supplies, land preparation, planting, fertilizing and pest control, picking, selling, and recordkeeping. Many small farms hire seasonal workers at harvest time – pickers and sales staff primarily – but do the rest with family labor and perhaps one or two year-round helpers.

What is a farmer?

Have students draw and describe their idea (stereotype) of a farmer at the beginning of the year or project and then having them do it again at the end.

Strawberry Farm discussion:

How is a strawberry farm different from other farms? (Note that many farms are mixed and raise more than one crop, or crops and animals).

What do you think you would find at a strawberry farm?

Instruct students to draw pictures of a strawberry farm. Show pictures of an actual farm and compare them to the students' drawings. Compare using math terms relevant to the students' pictures and the photographs. Look for patterns and shapes, numbers of items, etc.

Extension Activity:

1. Visit a real working farm.
2. Go on a virtual farm field trip. Go to ncstrawberry.com for this tour.
3. Tell the students that they are going to become strawberry farmers. Plant a full strawberry garden or plant individual plants in containers. (See resources below)
4. Invite a strawberry farmer to your classroom at various times of the year – September/October when s/he is planting the berries; in the winter when s/he is dealing with cold weather; and, in the spring near harvest time. Each time, ask the farmer to share with students what s/he is doing at that time of year.
5. Interact with a strawberry farm via blog. NC Strawberry Association provides this resource at <http://wegrowstrawberries.blogspot.com/>.

Background Information:

This lesson can be extended to include many community helpers, or used as part of a larger unit on community helpers. It can also stand alone as a pre-lesson for preparing a school strawberry garden or a container garden. Strawberries are ideal for study because they are planted and harvested within the traditional school year (plant in fall, harvest in spring). They also require little care, so teachers can plan activities that fit into their schedules.

What DOES a farmer look like? Just like everyone else -- there is NO valid stereotype. It is important for students to understand what a farmer looks like. Anyone can be a farmer, even them. Kids often think about a farmer as someone who wears overalls and a straw hat and comes across the way we think about farmers in the "old days." When they see farmers today, they will find many

different kinds of dress and appearance. Having a farmer visit the class, viewing the “We Grow Strawberries” blog or visiting a farm will help dispel stereotypes.

The role of the farmer is varied on the farm. S/he is a business man who interacts with other businesses who will sell his product. S/he must have knowledge of weather. S/he must know how/when the crops grow. S/he must know how much money it will cost to pay his employees, to pay truck drivers, to pay for equipment. S/he must know what jobs/work will be completed during the entire process of growing to harvesting the crops. Jobs may include drivers (tractors, trucks); fall planters (each plug is planted by hand); spring pickers (each strawberry is picked by hand); sellers (at the farm, to the stores, at the stores); mechanic (able to fix and maintain equipment such as vehicles and watering systems.)

Farmers are essential to the needs of the community. Students should recognize that most of the food they eat was grown on a farm, processed in a factory, and sent to the store where consumers purchase it. These foods are available year-round in supermarkets. Fresh produce is now available year-round because it comes from farms in many parts of the U.S. and from other countries, but North Carolina farmers grow lots of fruits and vegetables. The produce from local farmers is available during the part of the year when our climate allows them to be grown and harvested.

Strawberry farmers in North Carolina plant in the fall (late September through October depending on location). The plants are set out as transplants in rows on raised beds covered with a special plastic. Between the rows, rye is often planted to prevent erosion. Throughout the year, farmers watch the weather for rain and extreme temperatures. They irrigate the berries when necessary. Strawberries are harvested starting in late April, throughout the month of May, and sometimes into June.

www.ncstrawberry.com/docs/NCStrawberryInfoforSchools.htm - A general introduction to NC strawberry production specifically designed for teachers (currently under construction but use this link)

www.ncstrawberry.com/docs/HomeGardenBerries.htm Strawberry Growing Basics (home garden)

<http://flastrawberry.com/> “Jammer” videos from the Florida Strawberry Association

www.agclassroom.org/

Assessment:

As the students are presenting their pictures, listen for specific vocabulary: wants, needs, farm, farmers, workers, food, plants and animals. Students should be encouraged to speak in complete sentences and express ideas so others may understand them. Students should be encouraged to ask appropriate questions about their peers’ pictures.

At the end of the project, have students draw another picture of what a farmer on his farm looks like. Compare the drawings from the beginning and from the end. Ask them what they learned about what a farmer looks like during the project.

North Carolina Strawberry Association – www.ncstrawberry.com

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