

March

..... HARVEST OF THE MONTH

SWEET POTATO

NC Standard Course of Study

Science

K.E.1.1 Infer that change is something that happens to many things on the environment based on observations made using one or more of their senses

1.E.2.1 Summarize the physical properties of Earth materials, including rocks, minerals, soils, and water that make them useful in different ways

1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth

1.L.2.2 Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth

2.E.1.1 Summarize how energy from the sun serves as a source of light that warms the land, air, and water

Social Studies

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

2.G.2.1 Give examples of ways in which people depend on the physical environment and natural resources to meet basic needs

2.G.2.2 Explain how people positively and negatively affect the environment

Healthful Living

1.NPA.2.1 Classify the sources of a variety of foods

Goal:

Students will test what they have learned about the life cycle and the supply chain of various local produce by reviewing what they learned in February about Sweet Potatoes. The activities in this lesson will also deepen students' understanding of where they exist within the global food system.



Activity Length:

Flexible. 45 minutes ideal



Location:

Classroom

Materials needed:

- Life Cycle Handouts
- Supply Chain Handouts
- Writing Utensils
- Food System Connection Cards, pre-cut
- Ball of yarn

Sweet Potatoes Life Cycle

Question for the class: Do you remember how sweet potatoes grow? What do they need to grow?

Tell students that because March's Harvest of the Month is the same as February's, we are going to test ourselves and see what we remember about the life cycle of sweet potatoes!

Pass out "Sweet Potato Life Cycle" handouts. Give students 5-10 minutes to fill in the different plant parts using the word bank on the handout. Go over the answers together using the script (invite students to join in narrating or acting out the process):

A Sweet Potato starts out as a tiny SEED like all plants. But when most people plant Sweet Potatoes, they don't plant the actual SEEDS. They plant SLIPS, which are little sprouts that grow out of a mature Sweet Potato. The SLIPS are planted in the ground to become Sweet Potato plants. If the plant gets SOIL + WATER, the SLIPS will send ROOTS down into the SOIL. Then the plant sends up its STEM toward the sky. It sends out its LEAVES to collect more sun. The ROOTS begin to spread out under the ground, and the Sweet Potatoes grow at the ROOTS' ends. A mature Sweet Potato can be saved to grow more SLIPS, and the cycle begins all over again!

Optional warm-up songs:

Roots, Stems, Leaves by the Banana Slug String Band

Sun, Soil, Water & Air by the Banana Slug String Band

Bonus: Have students act it by starting as a tiny little seed (ball on the floor), pressing their roots (feet) into the floor, stretching their stem (body) towards the sky, and opening leaves (hands).

Supply Chain

Question for the class:

WHERE do SWEET POTATOES GROW?

.....> They grow on a farm or they can grow in a garden (do we have them in our garden?).

Where can we get or buy SWEET POTATOES?

.....> We can buy them at the grocery store, farmer's market, or we can eat them at the cafeteria.

Pass out "Supply Chain" handouts. Say, we are going to test our memories again. Can we remember what the steps of the supply chain are that get the food from the farm to our plate? Give students 5-10 minutes to complete the handout. When everyone is done, go over the handouts together arriving at these answers:

Step 1: Harvest. The farmer has to harvest (pick) the sweet potatoes.

Step 2: Transport. A driver had to drive the sweet potatoes from the farm to the store or market.

Step 3: Prepare. Someone (a chef, family member,) had to wash and cook the sweet potatoes.

Step 4: Eat. And finally...after all that...YOU get to eat them!

Harvest of the Month Moment!



Before diving into the lesson, review the featured produce!
If space, gather in a circle or around the poster.

The Harvest of the Month for FEBRUARY is SWEET POTATOES!

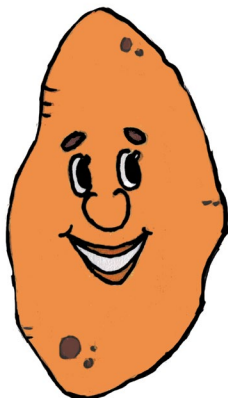
- *What part of the sweet potato plant do we eat? (Root)*
- *What state is the largest producer of sweet potatoes in the United States? (North Carolina)*
- *Do you remember what vitamin Sweet Potatoes are full of? (Vitamin A)*
- *What does this vitamin help us do? (See well/good eyesight)*

What's Growing On?



1. Our Place in the Food System

Warm up script: *How much do we really know about where our food comes from? Hopefully over the past few months, we have learned a lot about the journey our food takes to get from the farm to our plate, and all the people who help our food move around our town, state, and even country! In today's activity, we are going to spend some time diving even deeper into the food system.*



Food System Connections

Distribute a "Food System Connection" card to each student. Each card lists a part of the food system (on the front) and a some of the ways it relates to other parts of the food system (on the back). Give each student a few minutes to read their card and help them with any parts they may not understand. If there are more students than cards, students can be put in pairs or groups of three.

Have students stand in a circle, holding their cards so the rest of the

group can see. Give one student a ball of string. Have the student:

- State what is on their card
- Choose another card in the circle that they are connected to (based on the back of the cards) and say how they are connected
- Throw the ball of string to that student while holding on to the end

Then have the next student state what is on their card, make a connection, and throw the yarn while holding on to the string in front of them

Continue until students have created a tangled web of connections

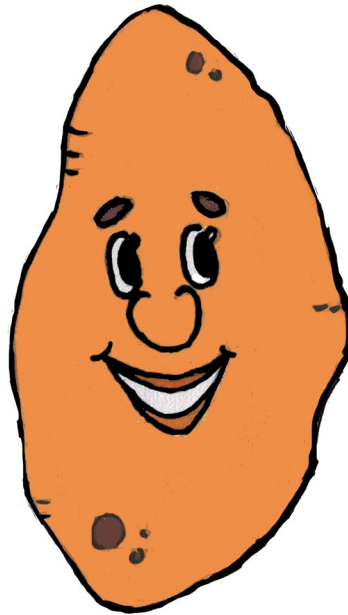
Students can throw to the same person more than once if there are multiple connections to be made

Next introduce events into the food system.

- Say, *Uh-oh! Some of the cows at a certain farm are sick, and cannot be eaten.* Have the person or group with the “cow” card give a small tug on their string. Multiple students will feel their string being tugged, too.
- Say, *Now there a drought, and no rain is falling on the crops to help them grow.* Have the student with the “water” card tug their string.

Debrief script: *What did this activity show you about the way the food system is connected (all the different parts are connected to each other; something that happens in one place can have an effect elsewhere.) What connections did you already know about? What connections were new to you?*

“What’s Growing On” activity adapted from “Exploring Our Food System Lesson A” developed by Foodspan. ©2016 John Hopkins University





Sweet Potatoes Supply Chain

Instructions: Use the word bank below to put the steps of the sweet potato life cycle in order from start to finish.

1.



Eat

2.



Harvest

3.



Transport

4.



Plant

5.



Prepare

Food System Connection Cards -FRONT

Fish

Chicken

Cow

Crop

Water

Sunlight

Farmer

**Truck
Driver**

**Grocery
Store**

Consumer

(a person who buys or prepares food)

Food System Connection Cards -FRONT

Fish

- I live in the water
- I am eaten by humans

Chicken

- I live on land but also need water
- I can be raised for eggs or meat
- I produce manure, which can be used to fertilize crops and make them grow stronger

Cow

- I live on land but also need water
- I can be raised for meat or milk
- I produce manure, which can be used to fertilize crops
- I produce methane, which can hurt the atmosphere and make the sun burn even hotter

Crop

- I need sun, water, and good soil
- I produce food and oxygen

Water

- I am needed by plants, animals, and humans
- I can become unsafe to use if I am contaminated with animal manure

Sunlight

- I am needed by plants, animals, and humans
- Plants need me to make food for themselves through the process of photosynthesis

Farmer

- I plant, care for, and harvest crops
- I raise and care for animals

Truck Driver

- I transport all kinds of food in vehicles
- The vehicles produce pollution, which can hurt the atmosphere and make the sun burn even hotter

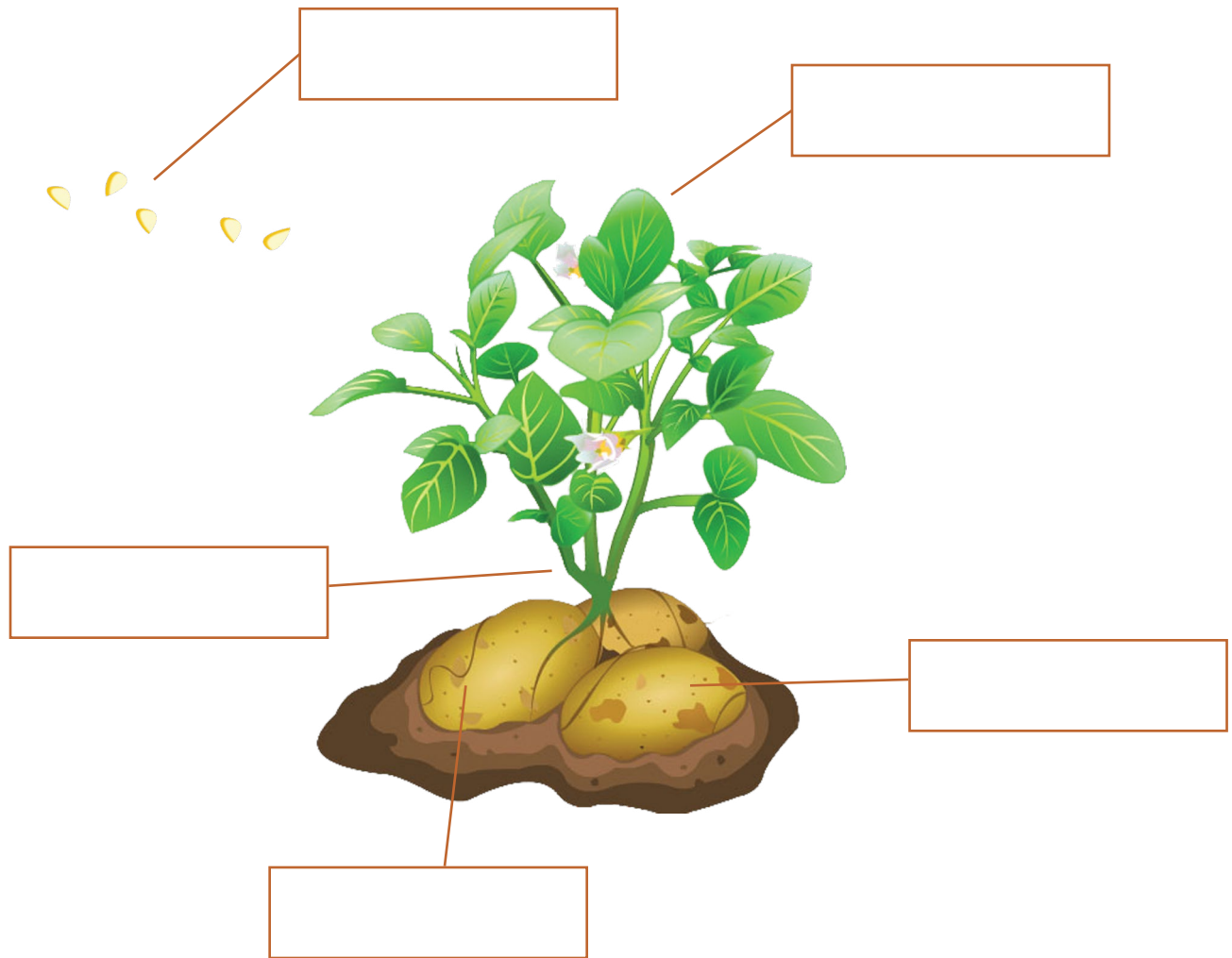
Grocery Store

- I provide a wide variety of food options
- I can sell food at a lower price than some smaller stores, which helps people who are on a budget

Consumer

- I buy, prepare, and consume food, including meat, milk, eggs, fruit, and vegetables

Life Cycle Handout



WORD BANK

ROOTS

LEAVES

STEM

SEEDS

POTATO