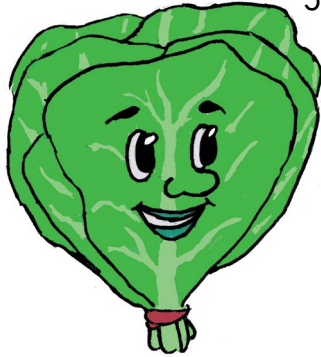


3-5th Grade



January

..... HARVEST OF THE MONTH

COLLARD GREENS & FARMER'S MARKET

NC Standard Course of Study

Math:

NC.K.CC.5 Use concrete and pictorial models, based on place value and the properties, to find the product of a one-digit whole number by a multiple of a 10 in the range of 10-90

NC Essential Standards

Social Studies:

3.E.1 Understand how the location of regions affects activity in a market economy.

3.C.1 Understand how diverse cultures are visible in local and regional communities.

4.E.1 Understand how a market economy impacts life in NC.

4.C.1 Understand the impact of various cultural groups in NC.

Materials needed:

- Collard Green leaf to pass around
- Index Cards (5 for each student)
- Prepared Collard Dollars

Required preparation:

- Print and cut Collard Dollars

Goal:

Through a farmer's market scenario, students will have a better understanding of where collard greens come from and how farmers are part of the local economy.



Activity Length:

45 minutes - 1 hour



Location:

Classroom

Collard Greens Life Cycle

Pass out “Collard Greens Life Cycle” handouts and ask students to follow along as you read the script. (Alternatively, students can practice reading and take turns read the different steps of the life cycle.)

- Before it grows into a plant, what do collard Greens start out as? **Seeds.**
- What do collard Greens need to grow? **Sun, Soil, Water, and Air.**
- If we plant a collard green seed in soil and give it water, after a few days it will start to grow **roots.**
- **Roots** provide a support system for the collard green plant. They draw water up from the soil along with nutrients like potassium and iron to help the collard green plant grow big and strong. **Roots** also keep the seedling in the ground and help it grow upright.
- After growing roots, the collard green seed will “germinate”, meaning it sends up a **stem and leaves.** These are the first parts of the plant that we can see above ground.
- What are the main role of **leaves? Photosynthesis!** The leaves collect energy from the sun. The collard green plant uses this energy to create food for itself.
- In collard greens, only the **outer leaves** grow wide and go through the process photosynthesis. The **outer leaves** are responsible for providing food to the whole plant. The **inner leaves** of the collard greens grow rapidly and instead of spreading out wide, they are tightly compacted and fold inward to form a head. A **head** of collard greens is what we eat!
- When the collard green plant is ready to make new plants, it will grow small **flowers.** In the life cycle of leafy greens such as collard greens, this step is called **bolting.**
- Inside each flower are several more **seeds.**
- Each one of the new seeds has the potential to create another collard green plant, and begin the cycle all over again!

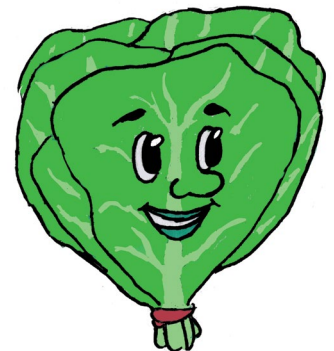
Supply Chain

Watch the video CAULIFLOWER: How Does it Grow?

<https://www.youtube.com/watch?v=EMoAUU5W6iw&t=20s>

Ask students to identify the different steps of the supply chain as seen in the video, arriving at the five main steps:

- Plant: The farmer had to plant the seeds or seedlings
- Harvest: The farmer and his or her employees harvest the produce
- Transport: A driver had to drive them from farm to the store, market or processing facility
- Prepare: Someone (a processing facility, chef, family member) has to wash and prepare the food
- Eat: Finally, after all that work, YOU get to eat it!



This video does not show the step of transporting the vegetable. This is a good time to quiz students. Ask, *are there any steps of the supply chain that we didn't see in this video? What are they?*

Harvest of the Month Moment!



Before diving into the lesson, introduce the featured produce!

If space, gather in a circle or around the poster. Feel free to use this space to share your own experiences with the harvest and celebrate what students know.

The Harvest of the Month for JANUARY is COLLARD GREENS!

Collard greens are a leafy green in the brassica family. Ask students, What other vegetables from the brassica family have we studied? (kale, cabbage).

They grow well most of the year in central North Carolina, and can survive the frost.

Ask students to find the harvest on the What's Growing On? Poster. If available, pass around the harvest and invite students to share observations (How does it feel, look, smell, sound?)

Consider asking some warm-up questions for students:

Have you tried it? When did you try it?

How does your family like to prepare this fruit/vegetable?

Do you have anything that you know about this harvest that you'd like to share?

What's Growing On?



1. New's Year Resolutions

At the New Year, it's a great time to set new goals for the year ahead

Warm-up:

- Pass out scrap paper and invite students to take about five minutes to write 2-3 goals for being healthier in the New Year.
- Make your goals SMART: Specific, measurable, achievable, relevant, and time-based

Examples:

- Eat all the vegetables on my plate at lunch at least twice a week.
- Exercise/Play Outside for 30 minutes at least 4 times a week
- Eat a different-colored fruit or vegetable every day

2. New Year's Collard Greens

Ask, *What is a tradition? Does anyone have traditional meals, such as for a holiday? Does your family or community have a tradition for New Year Celebrations?*

A Traditional New Year's dish in the Southern United States is black eyed peas, pork, and collard greens. The different foods represent health, wealth, and wisdom. More specifically, the leaves of collard greens are said to resemble money.

Read the following passage out loud, or ask student volunteers to take turns reading:

Why We Eat Black-Eyed Peas and Collard Greens at the New Year

Adapted from <https://www.southernliving.com/new-years/new-years-traditions-black-eyed-peas>

Many families have different food traditions for different events or holidays. Some have a special meal every Sunday or a specific menu each year for Thanksgiving.

One of the common regional traditions across many parts of the Southern United States is the New Year's Meal of black-eyed peas, collard greens, ham, and corn-bread. There are lots of different ways to prepare these dishes, and it is different in different states. Some traditional black-eyed pea recipes across the Southeast include: "Cowboy

Caviar" in Texas, "Hoppin' John" in Alabama, and Black-Eyed Peas with Ham in North Carolina.

Some people believe that the different foods symbolize things for the new year. In the book *Southern Food: At Home, On the Road, In History*, John Egerton's, a Southern food researcher, explains that black-eyed peas are associated with a "mystical and mythical power to bring good luck." The collard green, to some people, looks a lot like money, which could represent wealth in the new year.

Take the time to go over any words that may be unfamiliar to students.

If time allows, research "Cowboy Caviar" and "Hoppin' John" to discover some of the different food traditions across the country.

3. Farmer's Market Activity

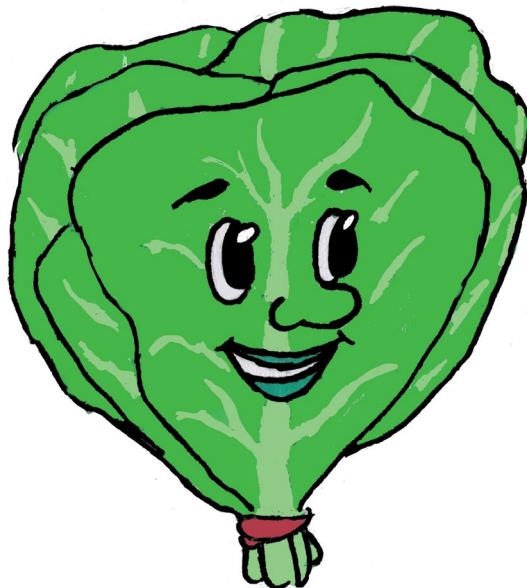
Imagine you are a farmer...how would you like to sell your produce? The grocery store? A farmer's market? Do you want people to come to your farm and pick food themselves? There are lots of different ways that farmers sell their produce.

1. Ask students: raise your hand if you've been to a farmer's market
2. Define terms:
 - a. Consumer: A person who buys or uses goods
 - b. Producer: A person who grows agricultural products or manufactures materials to be used
3. Tell students: today we are going to pretend we are farmers in Warren County who grows collard greens. We are going to sell our produce at a farmer's market!

4. Divide class into two groups, farmers and consumers
5. Pass out 5 index cards to each student designated as a farmer
 - a. Ask them to draw a different produce item on each of the cards, and price each item between 1-5 dollars.
6. Pass out 5-10 "Collard Dollars" to each consumer
7. Market Time!
 - a. Set a timer (depending on how much time you want to spend.)
 - b. When the timer is up, switch groups. Allow time for the new farmers to draw and price their produce, and make sure the Collard Dollars are distributed evenly among the new consumers.

4. Reflection Questions

- What kinds of things did you consider when deciding what to price each item?
- What factors could impact the price of your produce? (Length of growing season, availability, popularity)



Collard Greens Life Cycle



