



Cabbage Exploration



Projects All About Cabbage (and leaves!)

Goal: Introduce students to cabbage and how they grow.

At ASAP, Cabbage are the featured "Get Local" vegetable for October. Visit www.growing-minds.org for the full "Get Local in Schools" schedule.

NC Standards Addressed

Kindergarten: *English Language Arts:* 1.01, *Mathematics:* 2.01, 4.01, 4.02

First: *English Language Arts;* *Mathematics:* 5.02

Second: *Mathematics:* 4.01.

NC Common Core

Kindergarten: *English Language Arts:* RI.K.5; *Mathematics:* K.MD.1, K.MD.2, K.MD.3

First: *Mathematics:* 1.MD.4

Second: *Mathematics:* 2.MD.10



Materials

Cabbage Exploration Supplies

- Magnifying glasses (one per student)
- Small paper plates (one per student)
- One local red, green, and Asian cabbage
- Diagram of leaf parts

Journal Supplies

- White and colored paper
- Cabbage facts
- Crayons and/or colored pencils

Accordion Book

- Pictures of cabbage at different stages of growth
- Strips of paper folded accordion style (one per student)
- Glue sticks
- Crayons, colored pencils, markers

Preparation: For the lesson you will need to get different types of cabbage – check your local farmer’s market! For the accordion book you will need to print and cut out the provided pictures of cabbage in different stages of



Book to Read
The Giant Cabbage
by Cherie Stihler



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growth. It would also be helpful to cut strips of paper for the book and for younger students fold the paper accordion-style.

Activities

Read **The Giant Cabbage** by Cherie Stihler. In this book, "Moose" discovers a very big cabbage in his garden that could win first prize at the Alaska State Fair. But there's a problem -- it's so huge he can't lift it! Various animal friends stop to help and through teamwork and positive attitude, they succeed and ultimately work together to make cabbage soup. An old Russian folktale about a large turnip inspired The Giant Cabbage, but this contemporary version uses verbal and visual twists that showcase its Alaska setting.

Vegetable Exploration

Varieties. Show the students different varieties of cabbage while they are still whole (red, green, Asian). **Look closely: A cabbage is made up of leaves!** Peel off one layer of leaves and show students the leaf's mid rib and veins. Draw a diagram of a leaf on the board and point out the different components of a leaf. Ask students what they think the middle of the cabbage looks like. Is it all one color or many colors?



The Cross Section. Cut the cabbages in half. Pass around the cross sections. What do the students see? How many layers can they count? Explain that cabbage is a series of leaves squeezed and wrapped together.

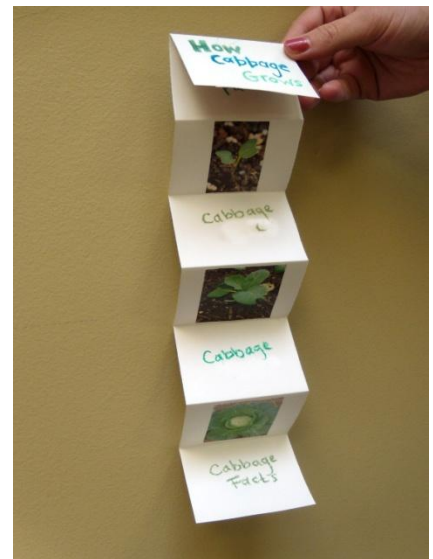
Give each student one slice of red, one green, and one Asian cabbage. Ask them to look closely at the leaves through their magnifying glass. What do they see? Ask the students to make a journal page and draw or describe their observations.

Taste the Cabbage. Pass out the pieces of cabbage and ask each student to try one. Ask them to describe how the cabbage tastes and feels in their mouths. Is it soft or crunchy? Ask the students to vote on their favorite cabbage. Make a **pictograph** recording the results of the vote.

Write all of the student's cabbage observations in a chart with one column for each type of cabbage or in a VENN diagram.

Make a Cabbage Accordion Book (A sequencing activity)

Have students seen cabbage growing? Show the students photographs of cabbages at different stages of growth. Ask students to order and glue the pictures from beginning to end of a cabbage's growth in accordion books.





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They can glue the extra pictures in the cover or on the back pages of the book. Ask them to draw or write more observations about cabbage or paste cabbage facts on the empty pages.

Garden Exploration

Go out to the garden to observe cabbage, kale or collards. Before you go out to the garden, explain that kale and collards are cousins of cabbage. Ask the students to go on a kale hunt and see if they can identify one of these vegetables. What similarities does it have to cabbage? Do they see any caterpillars eating the kale? Any signs that there have been caterpillars eating the leaves? Pick a kale leaf and use it to review the parts of a leaf. If there isn't kale in the garden, pick a lettuce leaf and identify its parts.