



**SOUTH DAKOTA STATE
UNIVERSITY EXTENSION**

**Level:
PreK-K**



EAT WHAT YOU GROW

Overview: In this lesson, youth will learn the different parts of plants that we eat, and how to use drying and freezing techniques to preserve foods for later use.

Contributors: Activities written by Marlys Hauck-Fenner and Janhavi Virkar under the direction and review of Anna Barr.

The lesson was reviewed by the SDSU Extension Grow Getters Planning Committee: Audrey Rider, Kristine Lang, Ph.D., Aimee Ladonski, Rhoda Burrows, Ph.D., Prairey Walkling and Nikki Prosch.

The Grow Getters Program originated as a Master Gardener project in 2020 and is now a multi-departmental effort among SDSU Extension staff and volunteers.

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Activities in this Lesson:

- **Science Activity:** Harvest Vegetable Soup
- **Nutrition Activity 1:** Drying Herbs
- **Nutrition Activity 2:** Freezing Berries
- **Physical Activity:** Fruit & Vegetable Colors Freeze Tag

SD Early Learning Guidelines and Kindergarten Content Standards

- **Health (Nutrition):** 7.2.1 Demonstrate healthy practices and behaviors to maintain or improve personal health (Pre-K-2 standard)
- **Physical Education:** S4.E1.K Follows directions in group settings such as safe behaviors, following rules and taking turns (K standard)

Book:

Books may be available at school or community libraries.

Eating the Alphabet: Fruits & Vegetables from A to Z, by Lois Ehlert

While teaching upper- and lowercase letters to preschoolers, Ehlert introduces fruits and vegetables from around the world. A glossary at the end provides interesting facts about each food.

- Purchase the book: [Eating the Alphabet: Fruits & Vegetables from A to Z](#)
- Watch: “[Eating the Alphabet](#)” read aloud link by Learning Tree T.V.
- Consider these follow-up questions:
 - Which fruits and vegetables have you tasted?
 - Name some of the foods in the book that are: roots, leaves, stems, flowers, fruits, and seeds. Use the glossary to help with identification.
 - Are there any foods in the book that you can eat more than one part of?
 - » Pumpkins (fruit and seed); many fruits you eat also have seeds that you eat (strawberries, raspberries, cucumbers, tomatoes, etc.).

Growing Vegetable Soup, by Lois Ehlert

A father and child share the simple joy of planting, watering, harvesting, and making soup from vegetables.

- Purchase the book: [Growing Vegetable Soup](#)
- Watch: “[Growing Vegetable Soup](#)” read aloud by Lilia’s Bookshelf
- Consider these follow-up questions:
 - How do you grow a vegetable?
 - » Plant seeds in the ground, water the plants, wait for them to grow, and pull weeds. Pick or dig up the vegetables.
 - What kind of vegetables are used to make vegetable soup?
 - » Tomatoes, potatoes, beans, carrots, onions

HARVEST VEGETABLE SOUP

Science Activity
Pre-K-Kindergarten

In this activity, students will draw their favorite vegetables from each plant part onto their own 'vegetable soup pot.'

Time: 30-40 minutes

Prep: 5 min.

Materials

- Plant Part Picture dictionary sheet
- Harvest Vegetable Soup activity sheet
- Crayons, markers, or colored pencils

Steps

Ahead of time:

Print enough picture dictionaries and Harvest Vegetable Soup activity sheets for each student.



Instructions for the students:

1. Pass out the activity sheet and picture dictionary to each student. Students write their names on the top of the "My Harvest Vegetable Soup" activity sheet.
2. Ask students to look at the Plant Part Picture Dictionary sheet and circle one vegetable from each plant part category that they would like to have in their soup.
3. Students draw each vegetable they circled into the soup pot on their activity sheet.
4. Optional: students share with the class what they added to their soup and why.

Guiding Questions:

Immediately after the setup:

- What are some of the plant parts we eat?
 - Roots, stems, leaves, flowers, fruit, and seeds

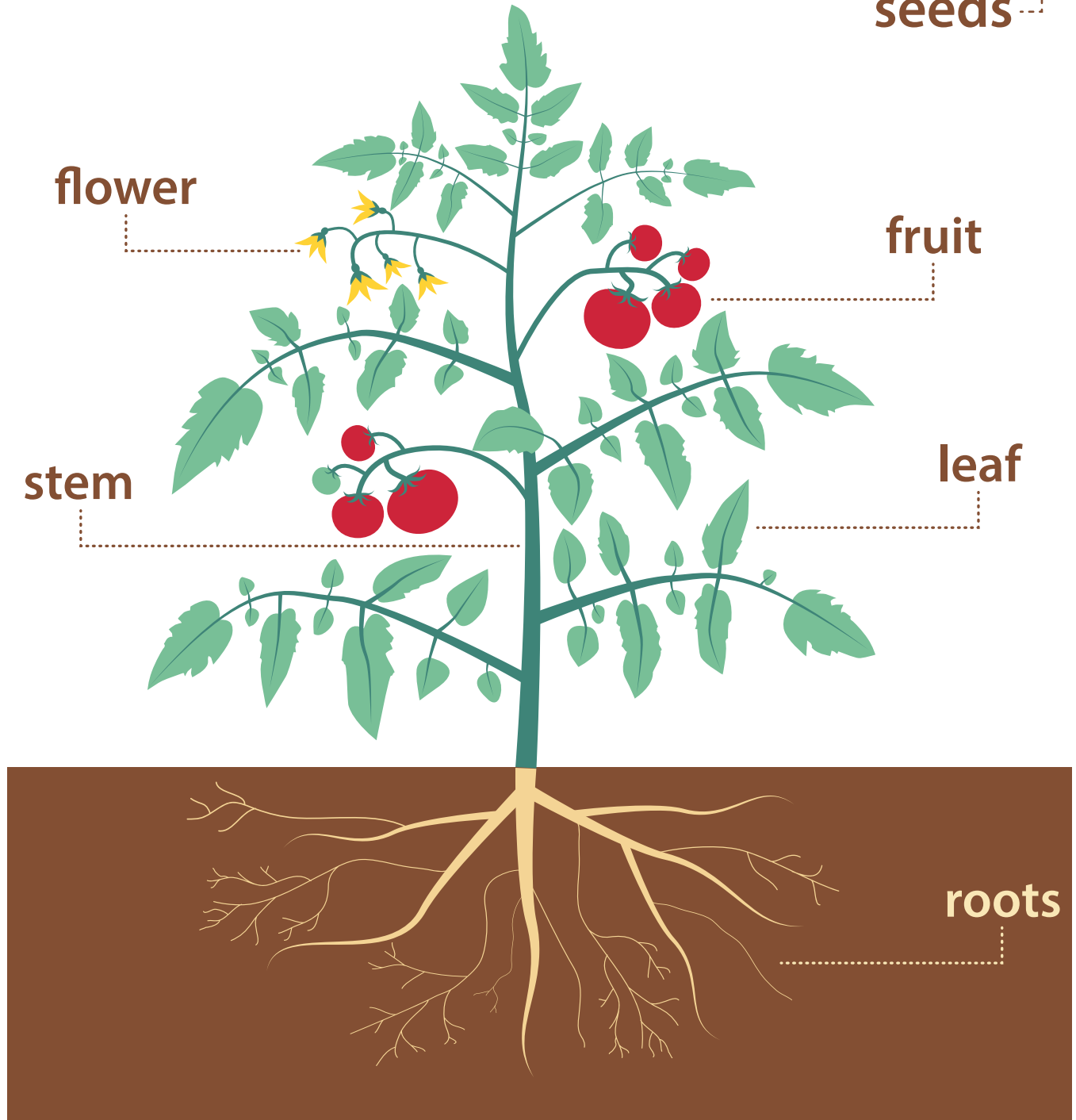
During the activity:

- Which plant parts do you like best to eat?
 - Roots, stems, leaves, flowers, fruit, and seeds

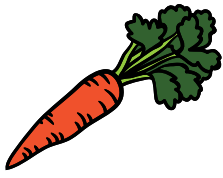
Modification notes:

- **If a garden is available:** Learn about harvest by doing hands-on harvesting. Students, ask an adult when the fruits or vegetables are ready to pick. If you do not have a garden of your own, you might be able to help a neighbor or friend or visit a community garden when the gardeners are working in their gardens. Other places to help pick produce is a U-pick it strawberry patch or apple orchard. Often pumpkin growers allow you to visit the patch in the fall to pick your own pumpkins. Consider making vegetable soup from what is picked and try picking each type of plant part.
- **Simplification:** Remove the requirement to use one vegetable from each plant part and allow students to draw any 5-6 vegetables into their soup.

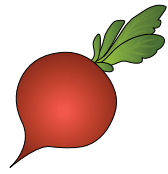
PLANT PART PICTURE DICTIONARY



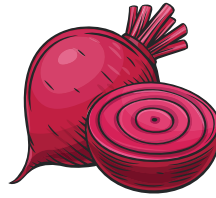
ROOTS



Carrot



Radish



Beets

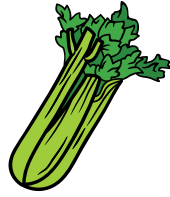


Turnip

STEMS



Asparagus

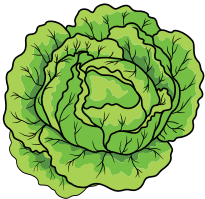


Celery



Rhubarb

LEAVES



Lettuce



Spinach



Kale



Herbs



Cabbage

FLOWERS



Cauliflower



Broccoli



Squash Blossom

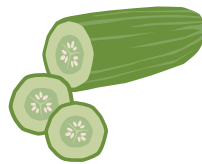
FRUIT



Tomatoes



Peppers



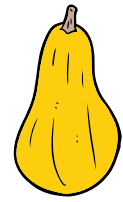
Cucumber



Green Beans



Pumpkin

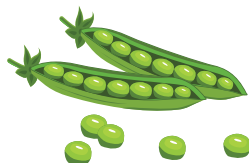


Squash

SEEDS



Corn



Peas



Sunflower Seeds



Pumpkin Seeds

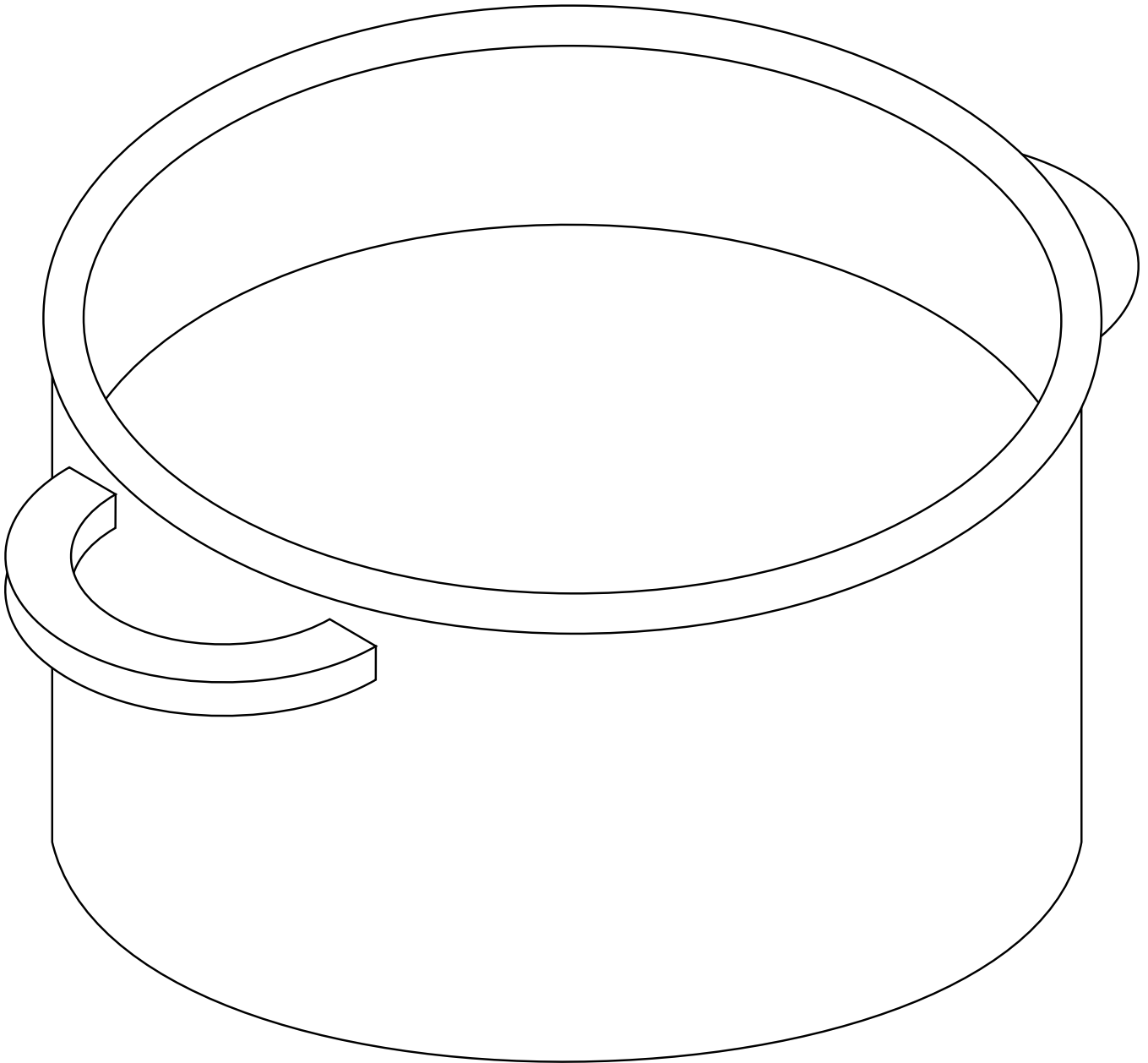


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GROW GETTERS

Name(s): _____ Date: _____

MY HARVEST VEGETABLE SOUP



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DRYING HERBS

Nutrition Activity
PreK-3rd Grades

In this activity, students will preserve fresh herbs by drying. Drying is one of the oldest methods of preserving food. Optionally, make a vegetable dip with the dried herbs.

Time

Prep: 5 minutes

Activity: 20 minutes

Drying time: 2 weeks

Materials

- Variety of herbs (dill, basil, parsley, and mint work well)
- Scissors
- Rubber bands and/or coffee filters

Steps:

Ahead of time:

- Collect scissors and rubber bands or coffee filters, depending on drying method.
- Purchase or harvest available fresh herbs.



Instructions:

1. If you have herbs in your garden, invite youth to help cut several stems. Herbs are best harvested just before they bloom and in the morning after the dew dries.
2. Invite youth to wash the stems and shake them dry.
3. Dry herbs by your method of choice.

Hang dry method

1. Wrap the bottom of the stems tightly with a rubber band. Hang them up-side down in a warm, dry place out of the light. An unused cupboard or closet is a good choice. It will take about a week to dry completely.
2. When dry, strip the leaves from the stems and store in a glass jar for use in any dried herb recipe.

Coffee Filter Method:

- If you prefer to dry only the leaves, strip them from the stems and spread to dry on coffee filters in a warm, dry place.

Guiding Questions:

Before the Activity:

- When are herbs ready to dry?
 - When they have flower buds, but the buds haven't opened into flowers
 - Early in the morning when they have the most flavor.

During the Activity:

- What is a good way to dry herbs?
 - Either leave the leaves on the stems and hang the stems to dry or take the leaves off the

stems and place them on coffee filters to dry

After the Activity:

- When are the herbs ready to use?
 - As soon as they are completely dry and crispy
- How to you keep herbs to use later?
 - The best way is to store them is in a glass jar in the cupboard
- Which herb do you think will dry the fastest or slowest? Why?
 - Get students to recognize differences among sizes and thickness of the plant leaves

Modification Notes

Extension: Grow herbs in a garden, in a pot along a window sill, or under a grow light with your students to use in this activity.

Extension: Dried herbs can be used to flavor foods, such as dips, soups, or pizza. Consider the following recipe with your dried herbs. This dip recipe can easily be substituted for different herbs.

DILL DIP

Combine:

- 1/3 C. plain, non-fat Greek yogurt OR 1/3 C. sour cream
- 1/3 C. mayonnaise
- 1 1/2 tsp. dried parsley, rubbed between hands
- 1 1/2 tsp. dill weed, rubbed between hands
- 1 1/2 tsp. instant minced onion
- 1/4 tsp. onion salt
- 1/4 tsp. celery salt

Mix together thoroughly. Chill for several hours. Use as a dip for fresh vegetables.



FREEZING BERRIES

Nutrition Activity
PreK-3rd Grades

In this activity, students will preserve berries by freezing. Optionally, make a berry and yogurt parfait with the frozen berries.

Time

Prep: 10 minutes

Activity: 30 minutes

Drying time: Overnight

Materials

- Variety of berries (red grapes, strawberries, blueberries, and/or raspberries work well)
- Colander
- Paper towels
- Baking pans
- Parchment paper or plastic wrap
- Zip lock bags



Steps:

Ahead of time:

- Purchase fresh berries or pick from a garden. To find a fresh, local berry grower near you, visit the South Dakota Specialty Producers [website](#) or Dakota Rural Action [directory](#).
- Gather all the materials for freezing the berries.

Instructions:

1. Select good quality fresh berries and rinse in a colander. If able, invite youth to help you pick fresh berries. Reference the SDSU Extension "[Pick it! Try it! Like it!](#)" materials to know how to pick fresh fruit from the store.
2. Invite youth to dry the berries thoroughly on paper towels.
3. Ask 1-2 students to line a rimmed baking sheet with parchment paper or plastic wrap.
4. Spread the berries on the baking sheet in a single layer. Put them in the freezer until frozen solid (overnight or longer).
5. Store in the freezer in a zipper freezer bag.

Guiding Questions:

Immediately after setup:

- Identify the berries we are going to freeze. Which are your favorites?

During the Activity:

- How do you think the berries will taste after they are frozen? Will they still look the same and feel the same in your mouth?
 - Berries should look the same but the texture will be different. The berries will be softer and have more water after freezing and thawing.

After the experiment

- Did you like the taste of the frozen berries?
- Can you think of some ways to use frozen berries?
 - They can be eaten partially frozen, put on top of cereal, or used in a parfait or fruit smoothie

Modification notes:

Extension: Frozen berries can be used to prepare a fruit parfait by layering frozen berries with any flavored or unflavored yogurt.

FROZEN BERRY PARFAIT

Ingredients:

- ½ cup frozen berries of choice
- 1 cup yogurt of choice
- Optional: granola or honey

In a 12 oz or larger cup, layer 1/3 cup yogurt, followed by 1/4 cup frozen berries. Repeat until all ingredients have been used (yogurt should be on the top). Optionally, top with honey and/or granola. Place in the fridge to allow the berries to soften and mix with the yogurt.



Note: Yogurt can be high in added sugars. Look at the back of the label to choose an option with little or no added sugars. Greek yogurt is a good option for higher protein.

FRUIT & VEGETABLE COLORS FREEZE TAG

Physical Activity
PreK-Kindergarten

In this activity, students will reinforce their knowledge of “freezing” by playing freeze tag with a fruit and vegetable colors twist.

Time

Activity: 15 minutes

Materials

- No materials needed.

Steps

1. Choose a leader or tagger among the group of students.
2. The leader (tagger) calls out a color and then starts playing tag with the rest of the group.
3. Students who get tagged by the leader must “freeze”. To get “un-frozen” the child must get tagged by another child and then name a fruit or vegetable that is the same color as the color the leader called out. Optional: add a time limit for answering.
4. If the child that is tagged provides an appropriate answer (i.e., strawberry for color red), they are “un-frozen” and can continue running. If they provide an incorrect answer, they remain frozen until they get tagged again by another student and say the right fruit or vegetable to match the color or a set time for the game has been reached. A new leader/tagger can be chosen and a new color called to continue the game.
5. The game ends when everyone is frozen, time limit reached or when all the color groups have been completed.



Guiding Questions

Immediately after setup:

- Ask... What different colors do you see in fruits and vegetables?
 - Red, orange, yellow, green, purple, brown

During the activity:

- Ask... Is it good for us to exercise and be active?
 - **Answer:** Yes, exercise will help us build strong muscles and bones and be healthy.

After the activity

- Ask... Can eating fruits and vegetables help us play games and be faster?
 - **Answer:** Yes, they help give us energy.
- Ask... How are you feeling? Is your heart beating fast?

Modifications

- **Advanced:** Rather than calling out a color, call out a letter of the alphabet and name a fruit or vegetable that starts with that letter.
- **Advanced:** Ask the students to call out fruits and vegetables based on plant part categories.
- **Simplified:** If the color matching is too challenging, you can eliminate the color and instead have students call out any fruit or any vegetable to get “un-frozen”.
- **Tip:** Encourage students to name different fruits and vegetables each time and not repeat what they hear other students saying.
- **Tip:** If you have a large group of students, two+ leaders or taggers can be chosen.

Additional Resources

If you liked this lesson, you may also like these other educational materials from SDSU Extension.

Nutrition and Physical Activity

- [Pick it! Try it! Like it! Preserve it!](#) materials are filled with tips for selecting, preparing, and preserving a wide variety of fruits and vegetables. Colorful fact sheets, recipe cards, and educational videos provide educators and families with fun, engaging tools to enhance any dietary curriculum!
- [iGrow Readers](#) is a series of book-based lessons to help young children understand the benefits of making healthy decisions involving nutrition and physical activity.
- [South Dakota Farm to School Resource Guide](#) walks through the basics of starting farm to school programs in South Dakota, including local food selling/purchasing, school gardens, and in-class education.
- [Preservation](#) this page provides a suite of educational materials and programs offered by SDSU Extension related to food preservation.

Horticulture

- [Garden and Yard](#) this page provides easy access to all the educational materials and programs related to garden and yard by SDSU Extension. This frequently updated landing page includes sections for fruits, vegetables, problems and solutions, master gardener volunteer program, garden hour, and more.
- [Vegetable Gardening in South Dakota](#) this booklet will help you with basic vegetable gardening information and tips to get started.
- [Fertilizing Gardens in South Dakota](#) this booklet by SDSU Extension provides information on soil testing, types of fertilizers, and methods of application.
- [An Identification Guide to Native Pollinator Plants of South Dakota for Managed Landscapes](#) In this guide, learn about the perennial plants native to South Dakota that attract pollinators and can be incorporated in to gardens.
- [Tree Pest Alert](#) stay updated and informed with this weekly resource for selecting, planting, and caring for trees and shrubs all year round.

