

# What's So Great About Gardening?

1. Understanding MyPlate
2. Not All Vegetables Are Created Equal
3. Food System Sequencing
4. Garden Journal

**What's So Great About Gardening?**

Unit Introduction and Teacher Vocabulary	-	36
Linking to the Garden and Background	-	37
State Curriculum Identifiers	-	38-41
Lesson #1: Understanding MyPlate	-	42-44
Lesson #2: Not All Vegetables are Created Equal	-	45-47
Lesson #3: Food System Sequencing	-	48-51



<b>Journal</b>	-	52-55
----------------	---	-------



• Student Vocabulary	-	54
----------------------	---	----



• Tomato Taste Test	-	55
---------------------	---	----



<b>Teacher Handouts</b>	-	56-65
-------------------------	---	-------



• Multi-sensory Taste Testing Worksheet	-	56
---	---	----



• Food System Photos	-	57-65
----------------------	---	-------

**Unit Introduction:**

Students of all ages know that fruits and vegetables are important for a healthy diet. However, there are many barriers that prevent people from consuming enough fresh fruits and vegetables. These lessons introduce gardening as a way of overcoming these barriers, including the barrier of taste! Students will taste tomatoes from various sources to demonstrate that vegetables taste different depending on where and how they are grown. They will also learn to think about where their food comes from, and use this knowledge to help make healthy food choices.

**Teacher Vocabulary:**

**1. Understanding MyPlate**

**In-season** - food grown locally during a given time of year. Fruits and vegetables are “in-season” at different times of year throughout the country.

**Local** - food grown near the point of final sale or consumption. Local produce can be purchased at farmers’ markets and some grocery stores.

**Phytonutrients** - a bioactive plant substance that is not essential for human nutrition, but considered to have a beneficial effect on human health, especially disease prevention. Also called phytochemicals.

**2. Not All Vegetables Are Created Equal** (No Vocabulary)

**3. Food Systems Sequencing**

**Farmers’ Market** - a place where people can buy fruits and vegetables directly from the farmers that grew them.

**Processed** - foods whose final form is created through many steps and the combination of many ingredients, including preservatives and flavor enhancers.

**Linking to the Garden:** (refer to pages 28 through 30 in the curriculum Introduction)

**Schoolyear Programs**

**Recommended Month:** September

**Plant:**

Transplant: Collards, kale, lettuce

Direct seed: Radishes

**Harvest:** Tomatoes for taste test, if you have a summer garden

**Complimentary gardening activities:** General garden maintenance

**Growing Season Programs**

**Recommended Month:** October

**Plant:**

Direct seed: Garlic, Cover crop (late October)

**Harvest:** Tomatoes for tomato taste test (you may complete the activity using any available garden vegetable to compare to grocery store vegetables)

**Complimentary gardening activities:** General garden maintenance; harvest all summer vegetables and send home with students before first frost, sow cover crop seeds

**Background:**

Eating a variety of fruits and vegetables every day is a step toward better health that everyone should take. Diets rich in fruits and vegetables are associated with reduced risk of chronic disease, such as diabetes, high blood pressure, and certain types of cancer. Fruits and vegetables provide key nutrients such as vitamins A and C, folate (a B vitamin), magnesium, potassium, and fiber. However, most Americans do not consume enough fruits and vegetables due to barriers such as high cost, lacking knowledge of storage and preparation methods, and unfamiliarity with or distaste for available produce.

Gardening is an excellent means of empowering people to overcome these barriers and increase their consumption of fruits and vegetables. While gardening requires an investment of funds, a small, well-managed garden can provide a family with an abundance of produce from April through October. Gardeners develop a strong relationship with the food they grow, which encourages them to find creative ways to prepare them, and fosters food skill development. Finally, garden produce is always fresh, making it tastier and more nutritious than produce at grocery stores. Many gardeners may find that they like vegetables that they had previously disliked because they had only tasted out-of-season varieties available at the grocery store. This is because most produce in the grocery store is grown on commercial farms in places like California, Florida, and South America and distributed by long distance trucking to its final point-of-purchase. While we are lucky that we have access to fresh produce year round, long distance shipping often means that produce is picked before it is fully ripe, and it continues to lose flavor and nutrients along its journey to your table. Furthermore, a greater variety of crops can be grown in the garden than what might be available at food stores, allowing people to identify and grow different types of produce that suit their tastes and customs.

This unit is designed to expose students to a variety of fresh produce, and offer the opportunity to taste, smell, and see the differences between fresh, locally-grown foods and those found in the grocery store. The lessons will also highlight the differences between processed and unprocessed foods. Students will learn that there are often many steps involved in getting food from the farm to their table. Understanding that process can guide decisions about whether a food is healthy or unhealthy.

## State Curriculum Identifiers - What's So Great About Gardening? - Reading/English Language Arts Standards

Identifier	1st	2nd	3rd	4th	5th	Lesson #/s
<b>Standard 4.0 Writing</b>						
A.2.			c. Compose to inform using summary and selection of major points and examples to support a main idea	c. Compose to inform using a structure with a clear beginning, middle, and end and a selection of major points, examples, and facts to support a main idea	c. Compose to inform using relevant support and a variety of appropriate organizational structures and signal words within a paragraph	4
A.2.		d. Compose to inform using major points and examples to support a main idea	d. Compose to persuade using significant reasons and relevant support	d. Compose to persuade using significant reasons and relevant support	d. Compose to persuade using significant reasons and relevant support to agree or disagree with an idea	4

<b>Standard 6.0 Listening</b>						
A.1.	a. Attend to the speaker	a. Attend to the speaker	a. Attend to the speaker	a. Attend to the speaker	a. Attend to the speaker	1, 2, 3
A.1.	b. Respond appropriately to clarify and understand	c. Respond appropriately to clarify and understand	c. Respond appropriately to clarify and understand	c. Contribute relevant comments	c. Contribute relevant comments	1, 2, 3
A.1.				d. Relate prior knowledge	d. Relate prior knowledge	1, 2, 3
A.2.	c. Demonstrate an understanding of what is heard by retelling, asking questions, and relating prior knowledge	c. Demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing	c. Demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing	c. Demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing	c. Elaborate on the information and ideas presented	1, 2, 3
A.2.	d. Follow a set of multi-step directions	d. Follow a set of multi-step directions	d. Follow a set of multi-step directions	d. Follow a set of multi-step directions		2
A.2.					d. Draw conclusions based on the information presented	2, 3
A.2.	e. Listen carefully to expand and enrich vocabulary	e. Listen carefully to expand and enrich vocabulary	e. Listen carefully to expand and enrich vocabulary	e. Listen carefully to expand and enrich vocabulary		1, 2, 3
A.2.	f. Make judgments based on information from the speaker	f. Make judgments based on information from the speaker	f. Make judgments based on information from the speaker	f. Make judgments based on information from the speaker		1, 2, 3

## State Curriculum Identifiers - What's So Great About Gardening? - Science Standards

Identifier	1st	2nd	3rd	4th	5th	Lesson #’s
<b>Standard 4.0 Writing</b>						
A.2.			c. Compose to inform using summary and selection of major points and examples to support a main idea	c. Compose to inform using a structure with a clear beginning, middle, and end and a selection of major points, examples, and facts to support a main idea	c. Compose to inform using relevant support and a variety of appropriate organizational structures and signal words within a paragraph	4
A.2.		d. Compose to inform using major points and examples to support a main idea	d. Compose to persuade using significant reasons and relevant support	d. Compose to persuade using significant reasons and relevant support	d. Compose to persuade using significant reasons and relevant support to agree or disagree with an idea	4

<b>Standard 6.0 Listening</b>						
A.1.	a. Attend to the speaker	a. Attend to the speaker	a. Attend to the speaker	a. Attend to the speaker	a. Attend to the speaker	1, 2, 3
A.1.	b. Respond appropriately to clarify and understand	c. Respond appropriately to clarify and understand	c. Respond appropriately to clarify and understand	c. Contribute relevant comments	c. Contribute relevant comments	1, 2, 3
A.1.				d. Relate prior knowledge	d. Relate prior knowledge	1, 2, 3
A.2.	c. Demonstrate an understanding of what is heard by retelling, asking questions, and relating prior knowledge	c. Demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing	c. Demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing	c. Demonstrate an understanding of what is heard by retelling, asking questions, relating prior knowledge, and summarizing	c. Elaborate on the information and ideas presented	1, 2, 3
A.2.	d. Follow a set of multi-step directions	d. Follow a set of multi-step directions	d. Follow a set of multi-step directions	d. Follow a set of multi-step directions		2
A.2.					d. Draw conclusions based on the information presented	2, 3
A.2.	e. Listen carefully to expand and enrich vocabulary	e. Listen carefully to expand and enrich vocabulary	e. Listen carefully to expand and enrich vocabulary	e. Listen carefully to expand and enrich vocabulary		1, 2, 3
A.2.	f. Make judgments based on information from the speaker	f. Make judgments based on information from the speaker	f. Make judgments based on information from the speaker	f. Make judgments based on information from the speaker		1, 2, 3



## State Curriculum Identifiers - What's So Great About Gardening? - Health Standards

Identifier	1st	2nd	3rd	4th	5th	Lesson #/s
<b>Standard 6.0 Nutrition and Fitness</b>						
A.1.	a. Differentiate how the five senses affect food choices.					1
D.1.		a. List the six major nutrients: water; fat; vitamins; minerals; carbohydrates; and protein (only bold items covered).	a. Describe the six major nutrients and how the body uses them (only discusses vitamins and minerals).	a. State how nutrients in foods contribute to health.		1
D.1.		b. Name a food source for each nutrient.		c. Summarize why the body needs vitamins and minerals.		1
E.1.	a. Describe how food keeps the body healthy by maintaining strong bones, muscles, and teeth and preventing illness.					1
F.1.	a. Recognize the MyPyramid as an outline for healthy eating.					1
F.1.				b. Identify factors that influence food choices.		1, 2
F.1.	b. Explain the location of the food groups on the MyPyramid.	b. Specify the number of servings recommended per day from each group (only fruit and vegetable groups).				1
F.1.	c. Demonstrate why it is important to eat at least five servings of fruits and vegetables a day, such as "Fruits and Veggies: More Matters."					1, 4



## State Curriculum Identifiers - What's So Great About Gardening? - Social Studies Standards

Identifier	1st	2nd	3rd	4th	5th	Lesson #s
<b>Standard 4.0 Economics</b>						
A.2.	a. Give examples of natural and human resources used in production, such as making butter, making ice cream, and building houses.	a. Identify the natural, capital, and human resources used in the production of a good or service.	c. Describe steps in the production process to produce a product.			3
B.1.	b. Identify markets in the local community, such as grocery stores, farmers' markets, toy stores, and fast food restaurants.					3



## Lesson #1: Understanding MyPlate

Time Required: 30 minutes (classroom activities: 30 minutes)

### Lesson Overview:

1. Students will engage in a discussion about the importance of fruits and vegetables in a healthy diet, and how gardening can be used to overcome barriers to eating the recommended amounts of fruits and vegetables.

### Students will learn that:

- Fruits and vegetables are essential to a healthy diet because they provide vitamins, minerals, fiber, and other nutrients.
- Many people do not eat enough fruits and vegetables for a variety of reasons.
- Gardening may help overcome many of the barriers to consuming fruits and vegetables.

### Gather

- Food models or magazine pictures of junk foods (“sometimes foods”) and food models or magazine pictures of fruits and vegetables (“all the time foods”)
- MyPlate graphic:  
<http://westerndairyassociation.org/wp/wp-content/uploads/2012/01/Eat-the-MyPlate-Way-English.pdf>  
[http://www.choosemyplate.gov/downloads/mini\\_poster\\_English\\_final.pdf](http://www.choosemyplate.gov/downloads/mini_poster_English_final.pdf)

### Process:

#### Introduction (5 minutes)

1. Explain to students that they are going to discuss the importance of nutrition and healthy eating.
2. Explain that it is important to learn good eating habits when we are young. Unhealthy eating habits can cause health problems later in life. If we eat poorly all of our lives, it is hard to change our habits when we develop health problems. If we eat healthy all of our lives, we will be less likely to get sick when we are older.

#### Engagement (5 minutes)

### Discussion Questions

1. What does it mean to be healthy?
2. How would you describe a healthy diet?
3. How can you tell if a food is healthy or not?

**Key Points**

1. A healthy person is not sick and has enough energy for work and for play.
2. A healthy diet includes foods from all food groups that provide our body with energy and nutrients, which allow our bodies to grow and function properly.
3. Sometimes it's hard to tell if a food is good for us by the way it tastes. Many foods taste good but aren't so good for our bodies. We are about to learn which foods are healthy and can be eaten all the time and which foods are not as healthy and are "sometimes foods."

**Activity** (20 minutes) Identifying Healthy Foods

**SUMMARY OF ACTIVITY**

1. Students will identify healthy ("all the time") and less healthy ("sometimes") foods, and discuss why many people don't choose healthy diets. They will then discuss how gardening can help overcome barriers to healthy eating.

**Activity Process** (20 minutes)

1. Explain to students that you will quiz them on which foods are healthy and less healthy. Explain that while it's okay to eat unhealthy foods sometimes as special treats, we should try to eat healthy foods every day.
2. Hold up different food models and have students decide if they are "sometimes foods" or "all the time foods."
3. Discuss with students what all the healthy foods have in common. Point out that they are all fruits and vegetables.
4. Explain that fruits and vegetables provide our bodies with nutrients such as vitamins, minerals and fiber, and it's important to eat them every day.
5. Explain that there are many healthy foods in other food groups. However, we are going to focus on fruits and vegetables, because many people do not get enough of them in their diet.
6. Display the MyPlate graphic.
7. Ask students how much of the plate is filled with fruits and vegetables.
8. SAY:

Doctors and scientists have learned that filling half your plate with fruits and vegetables at every meal is the best way to stay healthy.

9. Ask students if they think they fill half their plate with fruits and vegetables at every meal. Explain that most people do not.

If most people, including kids, know that they should be eating lots of fruits and vegetables, why don't they?

10. List all students' responses on the board. Encourage students to be honest and think broadly, to include reasons such as: dislike taste, never tried them before, high cost, not available, hard to cook/store.

11. Explain to the class that they have just listed some barriers to eating enough fruits and vegetables. Discuss the definition of a barrier (see Student Vocabulary, page 55)

12. Explain that gardening is a great way to overcome many of the barriers to consuming fruits and vegetables. Go back through the list and discuss how gardening can help people overcome barriers to eating fruits and vegetables. Below are some examples you can offer:

a. Dislike for produce is a barrier to eating fruits and vegetables. Home-grown vegetables are often fresher and tastier than grocery store vegetables. We can also grow vegetables that are not available in the grocery store, so gardeners might discover new vegetables that they like.

b. Lack of availability of produce in neighborhood food stores is a barrier to eating fruits and vegetables. Gardening provides access to fresh produce in the community.

c. The high cost of produce is a barrier to eating fruits and vegetables. After you pay for materials to start your garden, garden-grown fruits and vegetables are free!

d. Thinking that fruits and vegetables go bad quickly is a barrier to purchasing produce. Produce from the garden stays fresh longer than fruits and vegetables from the grocery store because they are picked fresh, and not shipped across the country.

13. Explain that gardening helps us learn where our food comes from and how to cook with fresh produce. Hopefully this will help us overcome some of the barriers to eating enough fruits and vegetables. Eating more produce will help us have healthier diets.

## Lesson #2: Not All Vegetables are Created Equal

Time required: 30 minutes (classroom activities: 30 minutes)

### Lesson Overview:

1. Students will be offered a taste test of tomatoes from different sources: some from the grocery store, and a few varieties from a local farm or from the garden. The students will use a handout to guide them in using all of their senses to experience the difference in the tomato varieties from different sources.

### Students will learn that:

- Fruits and vegetables are essential to a healthy diet. They provide vitamins, minerals, fiber, and other nutrients.
- Fruits and vegetables picked fresh from the garden during the growing season often taste different than those grown in far away places and shipped to the grocery store.
- Gardening allows us to experience varieties of produce that may taste different than what we have experienced in the past.
- In order to judge whether we like or dislike foods, we need to use all of our senses.

### Gather

- Ingredients for the taste test:
  - Three varieties of local tomatoes from the garden and/or a farmers’ market or farm stand (See <http://www.marylandsbest.net> for a list of farmers’ markets in your county); buy enough for every student to have a small taste of each variety. Try to find varieties that are strikingly different in color, size, and shape.
  - One variety of tomatoes from the grocery store (not a locally grown variety; you may try to find an underripe variety to ensure a dramatic contrast in flavor); buy enough for each student to have a small taste
- Equipment for the taste test: knife, cutting board, napkins or paper plates

### Setup:

- Make copies of the “Multi-sensory Taste Test” handout
- Wash tomatoes
- Assemble taste test materials

### Process:

#### Introduction (5 minutes)

1. Review key points from Lesson #1, discussing various barriers to eating enough fruits and vegetables, and how gardening can help us overcome these barriers.
2. Explain that it is easy to understand how gardening helps overcome some barriers, such as not having places to purchase fruits and vegetables in your neighborhood, or the high cost of fruits and vegetables. However, some might not realize that gardening can also help to overcome a dislike of fruits and vegetables.

**Engagement** (5 minutes)

**Discussion Questions**

1. What are some of the different places you can get healthy foods?
2. Do the same fruits and vegetables always taste the same? What is an example of a time when you had a fruit or vegetable that tasted different from past experiences with that same fruit or vegetable?

**Key Points**

1. Many of us probably get most of our food from the grocery store. However, we can also buy food directly from farmers at farmers' markets or farm stands. We can also grow some of our own fruits and vegetables.
2. Fruits and vegetables are tastiest when eaten during the season in which they naturally grow. Produce can be purchased fresh from farms not far from our homes. Buying fruits and vegetables "in-season" might help us find new fruits and vegetables that we like.

**Activity** (20 minutes) Multi-sensory Taste Test

**SUMMARY OF ACTIVITY**

In this tasting activity, students will sample tomatoes from the grocery store as well as some that were locally grown, and describe how each tastes, feels, looks and smells. Students will practice comparing several types of one particular food from different sources, so that they can recognize the differences between the varieties provided. Students will discuss their preferences and draw conclusions from the taste test.

**Key Points**

1. Tasting things slowly and thoughtfully will help us recognize new flavors and open our minds to new varieties.
2. Gardening will give us opportunities to experience new varieties of vegetables, as well as produce that is fresher than what we can buy at the store.

**Activity Process** (20 minutes)

1. Explain to the class that they are going to taste test several varieties of tomatoes. Some of the tomatoes were purchased at the grocery store, which means they were probably grown on big farms far away from here and shipped across the country to the store. Others were purchased at a farmers' market. This means that they were grown on a farm close to here, and picked and sold just a few days ago. These represent tomatoes that we could grow in a garden during the summer.

2. **NOTE:** Remember to review with students the importance of clean hands when preparing food. Have all students wash their hands before they handle the food. The curriculum introduction has a useful description of proper hand-washing techniques.

3. Remind students of taste testing rules. They should focus on experiencing new flavors and textures. It is okay if they do not like some of the samples, but their reactions must be polite.

4. Pass out the "Multi-sensory Taste Test" handouts and explain the process of the taste test. Students should read each question and record their responses before moving on to the next step in the taste test.

5. Cut the tomatoes and pass out samples of the different varieties, allowing the students time to record their observations between tastes. Be sure to keep each tomato's origin a secret until after students have recorded their thoughts.

6. Discuss their conclusions from the taste test. How were the tomatoes different? How were they similar?

7. Reveal which tomatoes were locally-grown. Explain that these are similar to what would be grown in a garden. Review and discuss the reasons that locally- or home-grown tomatoes taste, look, and smell different than grocery store tomatoes.

8. Review and discuss the fact that vegetables such as tomatoes, come in many types and varieties that have different flavors. Gardening allows us to grow and eat different varieties of vegetables that are not found in the grocery store.

## Lesson #3: Food System Sequencing

Time Required: 35 minutes (classroom activities: 35 minutes)

### Lesson Overview:

1. Students will uncover the many steps it takes to get a food from where it is grown to our plates. They will discuss how the steps from field to table affect the taste and nutrition content of our food.

### Students will learn that:

- Even though it is sometimes hard to tell, all food comes from farms or nature.
- Getting food from the ground to our stomachs may require many steps.
- The different steps food takes from where it is grown to when it is eaten affects its taste and nutrition.
- Gardening helps us understand where our food comes from which can help us make good food choices.

### Gather

- Pictures of (provided as an attachment to this unit):
  - Corn Pops® box
  - Corn on the cob
  - Garden
  - Farm
  - Farmers' market
  - Factory
  - Tractor trailer
  - Grocery store
- Tape

### Setup:

- Clear space on your chalkboard or wall for taping pictures in sequence.

### Process:

#### Introduction (5 minutes)

1. Review the conclusions from Lessons #1 and #2: fruits and vegetables taste different depending on when, where, and how they are grown. Growing fruits and vegetables in our garden can help us enjoy certain fruits and vegetables that we didn't think we liked.
2. Tell students that growing food in our garden also helps teach us where food comes from, which can help us make healthy food choices.

**Engagement** (5 minutes)

**Discussion Questions**

1. Could we grow all of the food that we need to eat in our garden?
2. What are some healthy foods that we will not be able to grow in our garden?

**Key Points**

1. We cannot grow all of the foods that we need in our garden. Fruits and vegetables are only one part of a healthy diet.
2. A healthy diet also includes things like whole grain breads and cereals, low-fat dairy products, and lean meats and beans. We are not able to grow all of these things in our garden, so we must get them from other sources.

**Activity** (25 minutes) Farm to Table

**SUMMARY OF ACTIVITY**

Students will sequence the various steps that various foods take from farm to table. They will use this exercise to draw conclusions about the difference between processed and unprocessed foods.

**Key Points**

1. All foods began on a farm, yet there are often many steps involved in getting our food from the farm to our dinner table. A processed food is one that has been through many steps and changes between the farm and your plate.
2. Unprocessed foods have been through fewer steps from farm to table, and they are generally more healthy than processed foods.

**Activity Process** (25 minutes)

1. Explain that it often takes many steps to get our food from farms to our bellies. The class will use a box of Corn Pops® to help understand those steps.
2. Spread the gathered pictures out on the table. Separate the pictures of Corn Pops® and corn on the cob and tape to the board on the right-hand side above one another.

**Note:** You can also complete this activity by selecting students to hold and display cards at the front of the room.

3. Ask students where they would purchase a box of Corn Pops®.
4. Have a student identify the picture of the grocery store. Tape it to the table to the left of the Corn Pops® box.
5. Ask how the food got to the grocery store.
6. Have a student identify the picture of the tractor trailer. Tape it on the board to the left of the grocery store picture.
7. Ask where the truck picked up the box of Corn Pops®.
8. Have a student identify the picture of the factory. Explain that a factory is a building where useful things are made. In this case, the factory made Corn Pops® and put them in a box. Tape the picture to the board to the left of the tractor trailer picture.
9. Explain that the factory needed ingredients and materials in order to make the Corn Pops. Ask how the ingredients and materials got to the factory.
10. Have a student identify the second picture of the truck and tape it to the board to the left of the factory.
11. Finally, ask what the main ingredient in Corn Pops® is, and where it came from.
12. Have a student identify the picture of a farm as the source of the corn used to make the cereal. Tape it to the board to the left of the picture of the factory.
13. Review the sequence of steps required to make the Corn Pops®. Corn was grown on the farm, it was transported to a factory, where it was processed and packaged, and it was shipped on a truck to the grocery store where it can be available for us to buy.
14. Point to the picture of corn-on-the-cob.
15. Explain that corn-on-the-cob grows right from the ground. It doesn't need to go to the factory before we buy it. It can go straight to the grocery store or farmers' market for us to buy.
16. Rearrange the picture sequence to show the corn coming from the farm straight to the grocery store.
17. Ask if there any other places we can get corn-on-the-cob.
18. Allow the students to identify farmers' markets and gardens as other places we can get corn-on-the-cob. Explain that farmers' markets are places where farmers bring food that they grow on their farms for people to buy.
19. Explain that most foods from farmers' markets are very fresh and healthy. However, if we have a garden, we can grow healthy food for ourselves, and we don't even have to purchase it!
20. Discuss the nutritional difference between processed and unprocessed foods.

**Discussion Questions**

1. What types of foods can we get straight from the garden or farm?
2. What are examples of foods that must be made in a factory before they are shipped to a grocery store and sold?
3. Which group of foods (foods that come straight from the farm or garden OR processed foods) are healthier food choices? Why?
4. Ask if they think they can identify processed foods. You may want to test them by giving them examples of foods and having students categorize them as processed or unprocessed.

**Key Points**

1. Fruits, vegetables, and eggs are examples of foods that we can get straight from the garden or farm. These are considered unprocessed foods because they have not been changed from their natural state.
2. Chips, donuts, and other junk foods are examples of foods that must be made in a factory and shipped to the grocery store. These are called processed foods.
3. Processed foods are less healthy because they often have unhealthy ingredients such as salt, sugar, and fat added to them to preserve them or to enhance their flavor. This is because these foods are not eaten fresh.
4. Usually, unprocessed foods are healthier than processed foods. Explain that imagining the steps a food takes from the farm to plate will help to decide if a food is processed or unprocessed (many steps = processed; few steps = unprocessed or minimally processed).

## Journal

Time required: 20 minutes (classroom activities: 20 minutes)

### Lesson Overview:

1. Students will write a creative written response to a prompt related to the content covered in the “What’s So Great About Gardening?” Unit.

### Process:

1. Read the prompt aloud to your students. After answering any questions, allow them time to write a response in their Garden Journals.

### Prompt:

Imagine we were going to try to sell some of our garden produce to other students at the school, and you are going to have time during the morning announcements to encourage students to buy our vegetables. Write a commercial for our garden produce that could be used on the morning announcements. Be sure to include details that describe how and where it was grown, and how that affects its taste and freshness, as well as the importance of fruits and vegetables for good health.





## Student Vocabulary

**Barrier** - something that prevents something else from happening.

**Factory** - a place where things are made by combining and changing materials into something new.

**Farm** - a place where food is grown for a large number of people.

**Farmers' market** - a place where people can buy fruits and vegetables from the farmers who grow them.

**Garden** - a place where food is grown for a family or community.

**In-season** - food grown locally during a given time of year. Different fruits and vegetables are “in-season” at different times of year throughout the country.

**Local** - food grown near where it is sold. Local produce can be purchased at farmers' markets and some grocery stores.

**Nutrients** - vitamins and minerals used by living organisms to grow and be healthy. Plants get their nutrients from the air, soil, and water; humans get nutrients from their food and water.

**Processed** - foods created through many steps and the combination of many ingredients, usually adding salt, sugar, fat, and artificial ingredients.

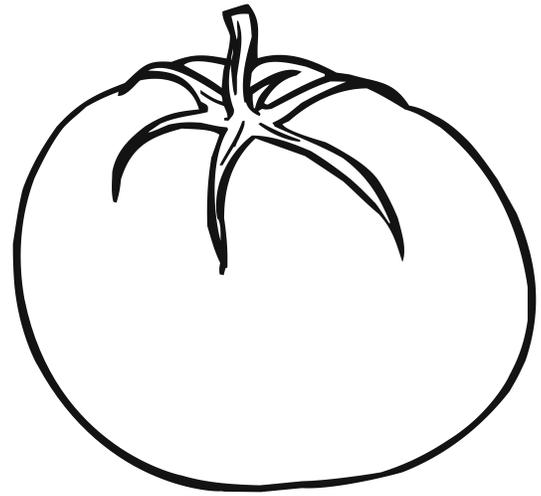
**Produce** - fresh fruits and vegetables.

**Shipping** - the process of moving goods from one place to another, often from the place they were grown or made to the place they will be sold.



# Tomato Taste Test

From July through October, farmers in Maryland grow all different shapes, colors, and sizes of tomatoes. Most grocery stores sell only a few types of tomatoes, but if you visit your local farmers’ market, you can buy green, purple, orange, and even striped tomatoes! Some are tiny, and some are huge and lumpy. Each type of tomato has a special flavor and texture. Lucky for us, buying in-season vegetables from a farmers’ market can also save money. This taste test will help you decide which type of tomato is your favorite!



Makes 20 sample portions  
Serves 8 as a main dish

### Ingredients:

4 tomatoes from a farmers’ market, 1 each of four different varieties, rinsed

### Directions:

1. Remove the core from each tomato and cut into chunks.
2. Take a sample of a tomato. Notice its color.
3. Smell the tomato. Notice its aroma.
4. Taste the tomato. Notice its flavor and texture (the way it feels in your mouth).
5. Make a note of your observations.
6. Repeat steps 2-5 for each of the different varieties.
7. Decide which is your favorite!

### Cook’s Note:

For information on Maryland Farmers’ Markets and to find the farmers market nearest to you, visit [http://www.mda.state.md.us/md\\_products/farmers\\_market\\_dir.php](http://www.mda.state.md.us/md_products/farmers_market_dir.php) and [marylandsbest.net](http://marylandsbest.net)

For information on applying for WIC Farmers’ Market Nutrition Coupons to help you buy fresh produce for your family at farmers’ markets, contact the Maryland Department of Agriculture: 410-841-5770 or 800-492-5590, <http://www.mda.state.md.us>



**REMEMBER TO  
WASH YOUR HANDS**



This material was funded by USDA’s Supplemental Nutrition Assistance Program – SNAP. The University of Maryland Extension will not discriminate against any person because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, and gender identity or expression. This institution is an equal opportunity provider. The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more about Maryland’s Food Supplement Program (SNAP), contact the Maryland Department of Human Resources at 1-800-332-6347 or apply online at <https://mydhrbenefits.dhr.state.md.us/>.



# Multi-sensory Taste Testing Worksheet

## Sample A

Write a word(s) describing how it looks:

Write a word(s) describing how it smells:

Now place the sample in your mouth, but don't swallow it right away. Chew it slowly and notice its texture as well as its flavor.

Write a word(s) describing how it feels in your mouth:

Write a word(s) describing how it tastes:

## Sample B

Write a word(s) describing how it looks:

Write a word(s) describing how it smells:

Now place the sample in your mouth, but don't swallow it right away. Chew it slowly and notice its texture as well as its flavor.

Write a word(s) describing how it feels in your mouth:

Write a word(s) describing how it tastes:

## Sample C

Write a word(s) describing how it looks:

Write a word(s) describing how it smells:

Now place the sample in your mouth, but don't swallow it right away. Chew it slowly and notice its texture as well as its flavor.

Write a word(s) describing how it feels in your mouth:

Write a word(s) describing how it tastes:

## Sample D

Write a word(s) describing how it looks:

Write a word(s) describing how it smells:

Now place the sample in your mouth, but don't swallow it right away. Chew it slowly and notice its texture as well as its flavor.

Write a word(s) describing how it feels in your mouth:

Write a word(s) describing how it tastes:

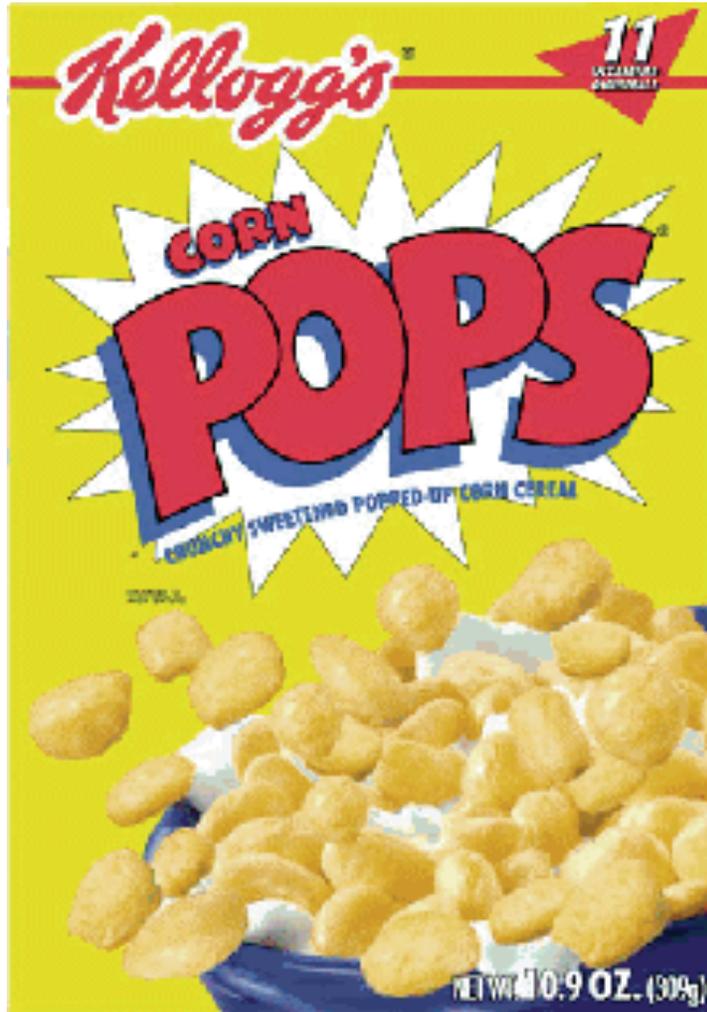


Based on your observations, decide which sample you preferred. Write the letter of the sample that you liked better in the box at the left.



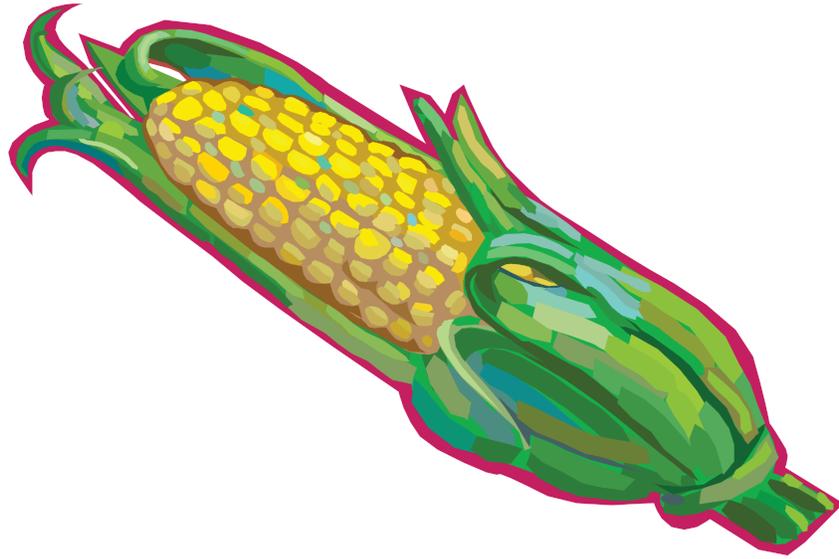
This material was funded by USDA's Supplemental Nutrition Assistance Program – SNAP. The University of Maryland Extension will not discriminate against any person because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry or national origin, marital status, genetic information, political affiliation, and gender identity or expression. This institution is an equal opportunity provider. The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to people with low income. It can help you buy nutritious foods for a better diet. To find out more about Maryland's Food Supplement Program (SNAP), contact the Maryland Department of Human Resources at 1-800-332-6347 or apply online at <https://mydhrbenefits.dhr.state.md.us/>.





# CORN POPS®





# CORN ON THE COB





# GARDEN





# FARM





# FARMERS' MARKET





# FACTORY





# TRUCK





# TRUCK





# GROCERY STORE

