



Root Connections: Sweet Potatoes vs. Yams

Grade Levels & Subjects: Grades 6-8 English Language Arts

Learning + Food Objectives:

Students will investigate the health benefits, origins, and the ways we consume root vegetables, specifically sweet potatoes & yams.

Common Core Standards:

Common Core English Language Arts

Comparing and contrasting

CCSS.ELA-LITERACY.RI.7.7

Compare and contrast a text to an audio, video, or multimedia version of the text, analyzing each medium's portrayal of the subject (e.g., how the delivery of a speech affects the impact of the words).

CCSS.ELA-LITERACY.SL.7.2

Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.



MATERIALS NEEDED

- Pilot Light Video: Making Sweet Potato Fries by Grace Chang <https://vimeo.com/591090644>
- Root Vegetables Student Worksheet (Attached below)
- Laptops & headphones
- Chart paper & markers

CLASSROOM PROCEDURE

INTRODUCTION (10 minutes)

1. Before this class session, refer to the **Resource List** within the student worksheet to gain background information about root vegetables and to ensure that technology is set up for the [Making Sweet Potato Fries](#) video.
2. Create four posters (big chart paper) labeled: SUMMER, WINTER, FALL/AUTUMN, and SPRING. Student responses to the opening activity will be added to these charts.
 - a. Make sure to either have enough sticky notes or markers for students to write their responses on these charts.
 - b. Alternatively, you could create these tables electronically and write in responses for students.
 - c. Consider preparing one or more samples for the opening activity or instructional lessons.
 - d. Consider posting additional pictures of root vegetables provided in the lesson or have laminated copies available for student groups/at student desks.
3. Help students access the **Student Worksheet (attached below)**.
4. Explain to students that the opening activity will require them to identify fruits and vegetables that they eat/are eaten at different times of the year.
5. Read/review a few of the student responses aloud. Then, engage students in a discussion around this prompt: What commonalities do you notice about the fruits and vegetables grown during the same season?

INSTRUCTION (80-100 minutes)

1. Explain that today we will learn what root vegetables are and specific facts about two of the most popular root vegetables - sweet potatoes and yams.
2. Direct students' attention to the **Resource List** in the student worksheet.
3. Explain that the class will use some resources together and others will be used with partners and small groups.
4. Tell students to go to the **Root Veggies Article Note-Catcher** section of the student worksheet as they pull up the article ["A Guide to Root Veggies" \(Oh My Veggies\) by Julie Mueller](#). Please note: If teachers can't access this article, they can select another one from the Resource List, like ["Everything You Need to Know About Root Vegetables" by Zoe Denenberg from Southern Living magazine](#).
5. Explain that the class will read the article - making note of key ideas from each section (identified in the note-catcher).
6. Next, tell students that the class will be learning more about sweet potatoes and yams - how to distinguish between the two and the benefits of each will be the focus on the group projects. Instruct students to form groups of 4-6 (or assign them to groups of 4-6).
7. Direct students to go to the **Yams vs. Sweet Potatoes T-Chart Activity**. Explain that they will use resources from the Images, Tables, and Infographics column on the Resource Table to find 4 facts about each.
8. The teacher should randomly assign at least 2 images/resources from that column to each group and if necessary and if time permits, the group can choose a 3rd image.
9. Bring the class back together to share out their findings before moving into the group project overview.
10. Now, instruct students to go to the **Root Connections: Sweet Potatoes vs. Yams Group Project** section of the student worksheet.

- a. Read through the directions and parts of the project - allowing time for clarifying questions and concerns.
 - b. Point out that the group project has 3 parts and remind them to discuss how they want to **divide the work**.
 - c. The teacher can opt to create group assignments before class or allow students to form on their own.
11. Consider using this time to discuss how the project will be graded and the logistics of presentation day
 12. Allow time for students to work on their projects. Teachers should determine how to split the time if the research/project work time needs more than one class session.
 13. On presentation day, discuss what "active listening" looks like when students aren't presenting.

CLOSING (10 minutes)

1. Follow the steps to compare yams and sweet potatoes in the Venn Diagram.
2. Turn in (submit) your student worksheet when you are done.

ADDITIONAL RESOURCES

- See Resource List

RECIPE FROM VIDEO

Video: [Pilot Light Video: Making Sweet Potato Fries by Grace Chang](#)

Below is the recipe from the video in this lesson. Pilot Light Anywhere lessons are designed to be able to be delivered from a remote setting; however, this recipe can be demoed by the teacher virtually/in person, sent home to families, or used for reference.

Recipe Name: Sweet Potato Fries

Serves: 2-3

Ingredients:

- List ingredient 1 (including measurements and any prep like chopping, washing, etc.)
- 2-3 sweet potatoes
- Olive oil (enough to drizzle fries before seasoning)
- Salt and Pepper, if desired

Materials:

- Knife
- Cutting board
- Baking sheet

Preparation:

1. Heat oven to 400 degrees.
1. Scrub any kind of sweet potato and cut into slices about 1 centimeter thick.
2. Then cut slices in sticks about 1 centimeter side. Try to keep the sticks uniform in thickness.
3. Coat generously with olive oil.
4. Add salt and pepper, if desired
5. Spread out in one layer next to each other on baking sheet.
6. Bake in middle rack for 30 minutes.
7. Turn fries so that different side can be on the baking sheet. Then, turn up to 425 degrees.
8. Bake about 10 minutes longer, checking frequently that they don't burn.
9. When fries are golden brown and crispy, take out of oven and sprinkle with fine salt.
10. Eat warm or room temperature.

The student worksheet below can be printed or copied onto any online learning platform.



Root Connections: Sweet Potatoes vs. Yams Student Worksheet

BELL RINGER: Vegetables by the Seasons Activity

Directions: Think about what vegetables you eat throughout the year. You have 1 minute to jot down as many as you can. Be ready to share your responses with your classmates.

Summer	Spring
Winter	Fall/Autumn

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Resource List		
Articles/Readings	Videos	Images, Tables & Infographic
"How the Sweet Potato Crossed the Pacific Way Before Columbus Did" by Michaelleen Doucleff	Pilot Light Video: "Making Sweet Potato Fries" by Grace Chang	"What is the difference between a yam and a sweet potato?" (chart) (by North Carolina Sweet Potatoes)
"What's the difference between a sweet potato and a yam?" by Alyse Whitney	"Difference between Sweet Potatoes and Yams" (Tech Insider)	"What are Root Vegetables?" by KidStir
"Everything you need to know about Root Vegetables" by Zoe Denenberg in Southern Living magazine	"What's the difference between yams and sweet potatoes?" (Bayer)	"Sweet Potato vs Yam: What's the Difference?" by WebstraurantStore Blog
"What is the difference between a Yam and a Sweet Potato" by North Carolina Sweet Potatoes	"Weird and wonderful root vegetables from around the world" (Eat Happy Project)	"Sweet Potatoes vs. Yams: What's the Difference?" by Mississippi State University Extension
"The Pros and Cons of Root Vegetables" (Harvard)	"Fresh Things: Root Vegetables vs. Tubers" (FreshPoint, Inc)	"15 Most Popular Types of Potatoes" by Only Foods
"13 Healthiest Root Vegetables" (Healthline)	"Sweet Potatoes: History & Nutrition" (watchsuperfoods)	"The Best Potatoes To Use for Each of Your Favorite Tater Recipes" by Lisa Milbrand in <i>Real Simple</i> Magazine
"A Guide to Root Veggies" (Oh My Veggies) by Julie Mueller	"Sweet Potatoes & Yams: What's the Difference?" (Vox)	"Do I Know Who I Yam?" (chart in an article "5 Special Kinds of Sweet Potatoes, And How to Eat Them" by Kate Bratskeir and Damon Dahlen in HuffPost)

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Root Veggies Article Note-Catcher

Directions: Read the assigned article and based on the facts presented in the article and other resources, complete each row of the table below.

What is a "Root Vegetable"? (Define)	
What are the Health Benefits of Root Vegetables	
When Do Root Vegetables Grow & When Do You Eat Them?	
How Do You Choose or Harvest Roots Vegetables?	
How Do (Should) You Store Root Vegetables?	
What Are the Types of Root Vegetables?	
How Do You Prepare Root Vegetables?	

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Yam-Sweet Potatoes T-Chart Activity

Directions: Choose 2-3 images from the **Resource List** to compile facts about sweet potatoes and yams. Write the title or cut/paste the link to each resource used.

Resource #1: Resource #2: Resource #3:	
Yams	Sweet Potatoes

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Root Connections: Sweet Potatoes vs. Yams Group Project

Directions: With your group, read and complete each of the parts of the group project detailed below. *Be sure to discuss how your group will divide the parts of the project.*

Part 1: Watch the [Pilot Light Video: Making Sweet Potato Fries](#) and respond to the questions below related to **sweet potatoes**.

Video Title: Pilot Light Video: Making Sweet Potato Fries by Grace Chang	
Why is it important to wash the sweet potato well?	
What are some special characteristics of sweet potato (physical characteristics)?	
What are some things to keep in mind as you cut the sweet potato? How do you make sure they cook evenly?	
There are several tips to help make the fries crispy. Name one.	

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Would you add salt and pepper or some other seasonings? Why or why not?

Part 2: Now, choose another video from the list or use the video assigned to your group to find facts about **yams**.

Video Title:

Fact 1

Fact 2

Fact 3

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Fact 4	
Reflect on what you've learned so far using this sentence starter: <i>I noticed that _____</i>	
Reflect on what you've learned so far using this sentence starter: <i>I wonder if _____</i>	

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Part 3: With your group, create a **2-3-minute video or 4-6 slides** that outline the history, benefits and uses of sweet potatoes and yams. Use the **Root Connections Planning Template** below to plan out your project. Be sure to answer all the questions below in your final product. Be prepared to share your video or slides with the class.

What are root vegetables? <i>Include yams & sweet potatoes in this description</i>	What is the difference between these 2 root vegetables?	Where does each vegetable come from?
Describe the differences using labeled pictures or actual vegetables that you can show (video format).	How do people like to consume these root vegetables?	Why should we eat these particular root vegetables?
Mention at least 1 resource in your presentation so that your audience can learn more <i>Example, To learn more about yams, ...</i>		

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Yam or Sweet Potato Venn Diagram Exit Activity

Directions: Follow the steps below to compare yams and sweet potatoes in the Venn Diagram.

Step 1: Write the name of each vegetable above each circle - **Yams** on the left & **Sweet Potatoes** on the right.

Step 2: In the outer circles underneath each vegetable's name, describe the color, appearance **plus 1 other fact** about each vegetable.

Step 3: In the center write **1 thing** each has in common.

