



**DELICIOUS NUTRITIOUS ADVENTURES**

# Root for the Root!

Students will taste a variety of root vegetables, as well as products made from root vegetables, and will learn about how root vegetables provide important nutrition.

**GRADE LEVEL**

K-2

Modify content as needed

**TIME**

45 minutes



# Root for the Root!

---

## Objectives

- Construct a class list of known root vegetables.
- Compare and contrast a variety of root vegetables using your senses.
- Recall nutrition facts in regard to Root Vegetables using the R-O-O-T mnemonic trick
- Share a crazy Root Veggie fact with family.

---

## Supplies & Preparation

### **Supplies\***

- Whole carrots, preferably multi-colored (display and tasting)
- Roasted beets
- Fresh beet (for display)
- Celery Root (display and tasting)
- Parsnips (display and tasting)
- One fresh sweet potato
- Bag of sweet potato chips

\*Amount: you will want there to be enough for kids to try a 2-inch bite of each root veggie

- Optional: Read Aloud book (see list)

### **Preparation at Home**

1. Wash, peel and cut all veggies into small pieces, about 1-2 inches and keep in separate containers.
2. Set aside the fresh display vegetables so that kids can observe them and touch them. These do not need to be washed and should not be cut.

# Root for the Root!

---

## Part 1: Storytime

### Read aloud from one of book suggestions below (optional)

1. *The Gigantic Turnip*, by Aleksei Tolstoy & Niamh Sharkey
2. *The Giant Carrot*, by Jan Peck
3. *Carrots Grow Underground*, by Mari Schuh
4. *The Magic Beet*, by Kiya Kahl
5. *The Carrot Seed*, by Ruth Krauss

---

## Part 2: Getting to Know Your Vegetables!

- Pair/Share - Turn to your partner and share some of the different vegetables you have tried or heard of.
- Large Group - What are some of the different vegetables we heard shared? Try not to repeat any.
- Ask, have any of you heard of ROOT VEGETABLES? If students have, ask them to name the kinds they are familiar with and write them on the board.
- Hold up each of the root vegetables you have brought for students to see. Introduce each by name and write the names on the board.
- Ask, **“Why do you think these vegetables are called ROOT vegetables?”**
  - Allow students to hypothesize why they might be called root vegetables.
  - Explain that *root vegetables grow underground just like the roots of a tree or flower and absorb all the nutrients from the soil needed to grow a healthy plant above. The crazy part is that we eat the part that grows underground!* If you cannot see the vegetable when it grows, it’s a root vegetable.
  - Use the root vegetables to show which part of the vegetable grows underground, and which part you can see from above ground. Use a white board to draw a picture to display this.
- Ask students if they can think of other root vegetables. List those on the board.
  - Examples: Potatoes (all kinds, white potatoes, sweet potatoes, redskin potatoes, even BLUE potatoes), celery root, beets, radishes, turnips, sweet potatoes, jicama, onions, and garlic.

# Root for the Root!

- Explain how vegetables help keep our bodies strong and healthy. Tell the students you have four great facts about root vegetables that you would like to share with them. Write out ROOT vertically on the board.
  1. **R** - Root veggies grow underground and absorb nutrients from the soil
  2. **O** - Our eyes need Vitamin A and we get this from carrots
  3. **O** - Our hearts need potassium to regulate our blood pressure
  4. **T** - Tummies stay full because of the fiber in root veggies
- Raise your hand if you have ever bitten into a carrot. **“What sound do you hear when you bite into a carrot?”** Allow students time to consider the question and respond. If they have trouble, help them by explaining that when you bite into a carrot it makes a **CRISP** or **CRUNCHY** sound. Tell students that before cooking root vegetables they are **CRISP**.
- Explain to students that root vegetables are often cooked and mashed up like mashed potatoes. Ask, **“Have you ever eaten mashed potatoes?” “How would you describe the texture and flavor of mashed potatoes?”** Many people describe them as **SOFT** or **CREAMY**.
  - So root vegetables can be crisp, crunchy or creamy depending on how you eat them.
  - **What are other foods you’ve eaten that were crunchy?**
  - **What are other foods you’ve eaten that tasted creamy?**

---

## Part 3: Tasting Time!

### Review two rules for Health Eating lessons at school:

1. **Polite Bite:** Our first rule is that we ask everyone to take a polite bite.
    - a. Can you tell how something tastes by looking at it? You never know whether you’ll like something if you don’t try it.
    - b. Please take on small bite so you can know for sure whether you like it or not.
  2. **No-Yuck Zone:** Our second rule is that this room is a No-Yuck zone.
    - a. Ask, “What’s another word like yucky?”
    - b. If I try something and say, “That’s delicious,” you’ll all likely want to try it.
    - c. But if I said, “Blech, that’s the worst thing I’ve ever tasted,” no one else will want to try it and you will miss out. Everyone has different taste buds, and it’s important to respect that.
    - d. What’s a polite way to explain that you don’t like what you’ve tried? **“Not tasty to my taste buds.”**
-

# Root for the Root!

1. Ask students to observe with their eyes the root veggies on the cards.
  2. Pass around the display root vegetables and let them feel these as well.
  3. Ask students to notice similarities or differences between the vegetables (color and size).
  4. Taste the root vegetables one by one starting with CARROTS, then PARSNIP, then CELERY ROOT, then BEET, and finally the SWEET POTATO CHIP. **\*TASTE IN THIS ORDER!**
  5. Discuss how each root vegetable tastes and encourage students to use words like sweet, creamy, and crunchy as they taste.
    - a. Encourage students to use their sense as they try each one. Smell, feel, taste, sound (does it make a sound when you bite it?)
    - b. Encourage students to share what they liked or did not like about the ingredient.
- **NOTE:** See last pages for **Supplemental Information on Root Vegetables** that you can share with you students as they do their tasting.

---

## Wrap Up

### Whole Class Discussion

- Which was your favorite root vegetable? Why?
- What is something new that you learned about root vegetables?
- What words would you use to describe the taste and texture of root vegetables?
- Thank them for trying new foods and encourage them to make healthy eating choices and share some fun facts about root vegetables with their families.
- Send kids home with root vegetable recipe cards that they can try making at home for fun.

# Root for the Root!

## How to Incorporate Common Core Standards

### Reading Standards for Informational Text

#### Kindergarten

1. With prompting and support, ask and answer questions about key details in a text.
2. With prompting and support, identify the main topic and retell key details of a text.
3. Describe the connection between two individuals, events, ideas, or pieces of information in a text.

### Reading Standards, Foundational Skills

#### Kindergarten

1. Demonstrate understanding of the organization and basic features of print.
  - a. Follow words from left to right, top to bottom, and page by page.
  - b. Recognize that spoken words are represented in written language by specific sequences of letters.
  - c. Understand that words are separated by spaces in print.

\* Teacher uses finger to point to the words as she is reading them, allowing students to follow along. Teacher writes key words from the lesson on the board.

#### 1st-2nd Grade

1. Demonstrate understanding of the organization and basic features of print.
  - a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).

\*Teacher points out exclamation marks or question marks in the book. Teacher writes key words from the lesson on blackboard/whiteboard.

### Speaking and Listening Standards

#### Kindergarten

1. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

\* Teacher can facilitate this by asking if students understand \_\_\_\_\_, ask them if they have questions about the book, the root vegetable

# Root for the Root!

facts, etc. Teacher asks students questions throughout lesson to assess understanding.

## 1st-2nd Grade

1. Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

\*Teacher can facilitate this by asking if students understand \_\_\_\_\_, ask them if they have questions about the book, the root vegetable facts, etc. Teacher asks students questions throughout lesson to assess students ability to answer questions about key details.

---

## Supplemental Material On Root Vegetables

During the tasting, you can share with the students some of the following information:

### Background On Root Vegetables

- The most popular root vegetables are **carrots** and **potatoes**. But root vegetables come in all different **shapes, sizes and colors**.
- Other examples of root vegetables include **celery root, beets, radishes, turnips, and sweet potatoes**. **Onions and garlic** are also root vegetables.
- Root vegetables generally grow in the summer and are harvested late summer and into the fall. But they store well and can therefore be eaten throughout winter when little else is growing in cold climates.
- Root vegetables grow underground and absorb all the nutrients from the soil needed to grow a healthy plant above ground. That means they're jam--packed with great nutrients for us too!
- The more colorful, the better. A root vegetable's bright color generally means that it is packed with **phytonutrients** — what we call superhero nutrients. **These fight disease** and keep our bodies healthy.
- Root vegetables are generally **low in calories** and **high in fiber**, as well as starch and natural sugars for an energy boost!
- With some root vegetables, you can eat the greens that grow from them above ground, like beet greens and turnip greens.

### **Potatoes**

- The potato is a new world vegetable grown first in Peru around 200 B.C.

# Root for the Root!

- Spanish explorers brought the potato back to Europe, where it became super popular.
- Potatoes are the world's 4th largest food crop, following rice, corn and wheat.
- They are easy to grow, nutritionally powerful and obviously tasty!
- Folks around the world have suggested that potatoes can cure disease. Once it was even suggested that you could cure a toothache by putting one into your back pocket.
- Potatoes were the first vegetable to be grown in space back in October 2005.
- Idaho is the largest U.S. producer of potatoes, but they didn't start growing them until 1836.
- Potatoes are high in **potassium, vitamin C, vitamin B6 and fiber**. It's very important to eat the skin—50% of the potato's fiber can be found in it!
- Potatoes are really starchy can you can make flour from potato starch.
- Potatoes come in all shapes and colors — even blue!

## Carrots

- Carrots are another vegetable that come in different shapes and colors. While we all think of carrots as orange, there are several different varieties. When carrots were first cultivated in modern times, they came in red, black, yellow, white and purple, not orange.
- Carrots also come in many different shapes, including round.
- Carrots are a good source of **vitamin A, and a form of beta carotene**, which can boost your immune system and is good for your **eyes**.

## Parsnips

- The parsnip is a **root vegetable** related to the **carrot**. Parsnips resemble carrots, but are paler in color than most carrots, and have a sweeter taste, especially when cooked.

## Beets

- Beets are one of the most colorful root vegetables.
- Beets are often used as a natural dye—you can dye an egg with beet juice!
- Beets are packed with **follic acid**—if you eat enough of them, you might even pee purple!

# Root for the Root!

- Beets also contain “betaine,” a substance that relaxes the mind and “tryptophan,” which is also found in chocolate and makes us feel happy.
- You can use beet juice to measure acidity. If it’s added to an acid like vinegar, it will turn pink, when added to an alkali, it will turn yellow.
- Beets are used in some unusual ways in cooking. Beets are what originally gave red velvet cake its color. In Australia, people eat burgers with a slice or two of beets. Even McDonald’s and Burger King put them on their burgers.

## Sweet Potatoes

- Sweet potatoes are also often referred to as yams.
- The root known as a sweet potato or a yam is related neither to potatoes nor to true yams.
- They are part of a family of flowering vines called Morning Glories.
- Sweet potatoes were first grown in the American tropics.
- Our first president, George Washington, grew sweet potatoes on his plantation in Virginia.
- Sweet potatoes are a Native American plant that was the main source of nourishment for early homesteaders and for soldiers during the Revolutionary War.
- Sweet potatoes are high in **beta-carotene, vitamin E and vitamin C.**
- Sweet potatoes are a good source of **fiber** when eaten with the skin.
- Sweet potatoes offer other nutrients such as **potassium, iron and vitamin B6.**

## Radishes

- Radishes are related to mustard. They are part of the mustard family, which is why they are pretty spicy.
- They have been used medicinally for many years to cure a disease: whooping cough.