Seeds & Roots day three

LESSON A: Bare Root Bucket

Pull up carrots, grass and other types of roots planted in a bucket of soft soil.

Objective: Students will explore different root types and classify them as roots that can be eaten and roots that can't be eaten **Time:** 10 minutes

Materials:

Bucket or bin, soil, small weeds or section of grass carefully dug from the school ground, on bunch of root crop with green tops (carrots, radishes, turnips, beets work well)

Lesson Narrative

- Raise your hand if you can see my garden bucket with soil (dirt). (Show the Bare Root Bucket to the group.)
- 2. What do you see peeking out from the top of the soil? (Place bucket in the middle of the students so that each may view the bunch of carrots with greens attached along with the weeds.
- 3. What is in the bucket? (Allow students to share their individual answers.)
- 4. Let's find out. Teacher pulls carrots and weeds out of the bucket and shows students. Next, names the roots.
- 5. There are two types of roots. There are tap roots that grow straight down into the ground and fibrous roots that spread all around. Which do you think are tap roots and which are fibrous roots? Describe the roots.
- 6. Which of these roots can we eat? Hold up the carrots and then the weeds. Listen to students' responses. The roots we can eat are called *edible roots*.
- are called *edible roots*.
 7. This week we are going to begin learning about plant roots. Roots are a very important part of a plant. We are going to learn how the roots of a plant help it to grow. And, plants like these carrots, give us food to eat so our bodies grow big and strong.
- 8. Later we are going to cook together. We are going to make a recipe that uses an edible root. Is going to be so yummy and healthy for your bodies! Can anyone guess which root will be in added to our recipe?



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Use the featured books to do a picture walk or discus daily during this week. Below are some questions that can be discussed during the read aloud. Pick 1 or 2 questions each time you read or discuss the book.

- 1. What does a garden need to grow? What is a harvest?
- 2. The Hare, harvested the carrots, radishes and beets for his family to eat. He gave the tops to bear. Why did bear say that Hare kept the best parts?
- 3. What part of the plant are carrots, radishes and beets?
- 4. When Hare harvested the lettuce, broccoli and celery for his family and gave the tops to Bear, why did Bear scowl and say that Hare cheated him?
- 5. What part of the plant did Hare give Bear when he gave him the bottoms?
- 6. How did Hare trick Bear the last time he planted?



Learn, Grow, Eat & Go! EARLY CHILDHOOD

Lead student learn

before this lesson.

The Roots Song with motions

week 2

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LESSON B: Root Exploration

Objectives: Students identify and describe the appearance of a root. **Time:** 10 minutes

Materials/Prep:

Small potted plants (transplants, such as marigolds or pansies sold in 6-pack containers work well for s activity), 1 small section of square of grass carefully dug up to include roots, bucket of water, plastic table cloth (to cover teaching area)

Lesson Narrative:

- 1. What part of the plant is on the bottom in the soil?
- 2. Hold up small potted plant. What is it?
 - 3. Show students the section of grass.
 - 4. Us the bucket to gently rinse the soil away from the potted plant to reveal the roots of the plant. Describe the roots. Let the students feel the roots. Describe how the roots fee.
 - 5. Do the same with the section of grass and have students describe how the grass roots look and feel.
 - 6. All of the roots are very different but they all have the same important job of holding the plant in the ground and also to let the plant soak up water from the soil.

ACTIVITY: Clapping the Roots Song

Objective: Students will clap words and syllables demonstrate that sentences are made up of separate words and words are made up of separate sounds..

Materials: Roots are Growing in the Ground! Song

Lesson Narrative:

- 1. Clap each word in every sentence as you sing the song with students. Clap the words with me.
- 2. Count the words in each sentence. Hold up one finger for each word we say.
- When students are successful with words in sentences, pick out words from the song and have students clap the syllables in the words. Now we are going to clap syllables. Clap with me.
- 4. Hold up one finger up for each syllable in each word we clap. Model and practice with students.
- 5. Finally, review the vocabulary in the song and talk about the meaning of the words and song. Example: What is the difference between tap roots and fibrous roots?

Learn, Grow, Eat & Go! EARLY CHILDHOOD

Examine roots of a small, potted plant and the roots of a small section of grass.



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today's garden journal prompt: Draw a picture of a

root that you can eat.

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