



KITCHEN SCIENTISTS

LITTLE LAB WEEK 3: PLANT ROOTS

EVER WONDER . . . IF YOU CAN EAT ROOTS?

What we learned this week:

- Roots are the parts of a plant that grow underground and help to hold the plant in place and absorb water and nutrients.
- Thick roots with tiny rootlets are called “tap roots.”
- There are some roots we can eat!

Curiosity Circle



Captain Curiosity called and was wondering if we knew anything about the roots of plants. If they are always hiding underground, why are they important? The Captain was also curious to know if there are any roots that you can eat. We got busy by learning the answers to these “Ever Wonder?” questions: **Ever wonder what kind of scientist studies plants?** A scientist who studies plants is called a botanist. A botanist studies how plants grow and the different parts of the plant like the leaves, stem, and roots. **Ever wonder why a plant has roots?** Plants have roots to hold the plant in place and to absorb water and nutrients. When we look at a potted plant, we can see how the roots hold the plant in place. These roots draw up water much like we draw up water through a straw. If we look at a plant without roots, we can see that the plant is dried up and can't stand up on its own! **Ever wonder if roots can only grow in dirt?** Most plants grow their roots in dirt, but many plants can also grow their roots in water! For a plant in water to grow big and healthy, the water must have the same amount of nutrients as soil. Plants that grow in water are called “hydroponic” plants. **Ever wonder if you can eat a root?** Yes, we eat lots of roots, including carrots, beets, radishes, turnips and rutabagas. Of course, you can't eat *all* roots, but the roots we can eat are yummy!



Curiosity Centers



- ♦ **Discovery Activities:** We used the jumbo magnifiers to look at slices of edible roots, such as carrots, beets, radishes, turnips and rutabagas. We also used kitchen utensils to plant real roots and dig them up. We tried to make the plant stand up on its own by planting the root. We also weighed the veggies, washed them off and sorted them into the correct bins at our pretend store.
- ♦ **Manipulative Activity:** We “planted” beans in moist paper towels in a clear cup so that we could take them home and watch them sprout roots! (Beans sprout roots in just a day or two.)
- ♦ **Cooking/Art Activity:** We pretended that we were plants, drawing up water through our roots. We attached flowers and leaves to our root straws and we drew up fresh water from our plant pots.

The Big Deal

We went shopping for root vegetables at our pretend store! We weighed our item and brought it to the counter to buy with our special C-Zone bucks. At the end, we put our root veggies into a bin and did a “Let's root for roots!” cheer!

Hey, Hey Word of the Day: TAP ROOT

Curiosity @ Home

This week at home, discuss roots. Check out the roots on the plants at your house. Talk about how you have to water the plants inside the house so the roots have water to drink. Push gently on the plants to show how the roots hold them in place. Make the “root juice” recipe attached to your child's “root sipper.” Visit the veggie section of your grocery store and tap your foot when you see a tap root. Finally, plant your root viewer garden and be sure to observe it, and your beans from class, daily.



Songs & Poems

C-Zone Song Welcome Song

(to the tune "I'm a Little Teapot")
Welcome to the C-Zone
It's time for us to start
Exploring and learning
We all do our part
(Spoken) So button up your lab
coats and let's get curious!

Sing the Song to the Captain

(to the tune "Wheels on the Bus")
Roots help suck up water for plants
(What?)
Water for plants (What?)
Water for plants (What?)
Roots help suck up water for plants
(What?)
And hold them in place.

There are roots that you can eat
(What?)
You can eat (What?)
You can eat (What?)
There are roots that you
can eat (What?)
Like carrots and
rutabagas.

If it's a Tap Root (to the tune, "If You're Happy and You Know It")

If a carrot is a tap root, tap your
foot.
If a carrot is a tap root, tap your
foot!
If a carrot is a tap root, a rooty-
toot-toot tap root,
If a carrot is a tap root, tap your
foot.

If a radish is a tap root, tap your
foot.
If a radish is a tap root, tap your
foot!
If a radish is a tap root, a rooty-
toot-toot tap root,
If a radish is a tap root, tap your
foot.

If a turnip is a tap root, tap your
foot.

If a turnip is a tap root, tap your
foot!

If a turnip is a tap root, a rooty-
toot-toot tap root,

If a turnip is a tap root, tap your
foot.

Repeat with potato, beet, rutabaga,
etc.

C-Zone Goodbye Song

Goodbye from the C-Zone
It's time for us to go
The learning never stops
Now tell me what you know!

BEET

TAP ROOT
(the big root)



ROOTLETS
(the little roots)



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