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| Lesson: ROots |
| Activity Plan  |

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| Project Skills: |
| * To be able to identify what roots are and what they do for the plant. To know that there are roots we can eat.
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| Life Skills: |
| * Identify plant parts we can eat and know that they are healthy choices for food.
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| **Academic Standards:*** **Identify, describe, and taste different plant foods (Nutrition Ed B.4.4, C.4.2, D.4.1, E.4.1, F.4.1, F.4.2, F.4.3)**
* **Understand the function of various types of roots (Science F.4.1, F.4.2)**
* **Identify the six plant parts and describe the life cycle of plants**

**(Ag Ed D.4.1; Science F.4.3)** |
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| Grade Levels: 1-4 |
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| Time: 30 Minutes |
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| Supplies Needed:Root vegetables cut in halfRoot examples from the garden |
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| Do Ahead: |
| * Cut root vegetables in half.
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| Sources/Adapted From: |
| * Got Veggies: A Department of Health Services Garden Based Nutrition Education Curriculum
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| BackGround |
| Younger students are unfamiliar with plant parts and how a plant grows. The first thing to grow out of their seed is roots. That way the roots can suck up the nutrients and water in the soil to grow larger. Roots can come in many different shapes and sizes. Roots also provide support to the plant by anchoring it to the ground. |
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| WHAT TO DO |
| Activity 1: Do you ever wonder how a plant gets its water and food? It gets it from its roots! The roots act like a straw to help the plant get the water and food from the soil. What else might roots help the plant to do? (Stay anchored in the ground). The plant doesn’t want to tip over, so it uses its roots to help it stand up tall and grow towards the sun! |
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| **Activity 2:**  |
| The roots are the first plant part to grow out of the tiny seed. This is because the seed needs to suck up water and nutrients, but it can’t do it all by itself! Roots grow to be big and strong. Some roots we can even eat! Any guesses as to what are roots that we can eat? Let’s all pretend we are roots and suck up the water and nutrients around us! |
| **Activity 3:**  |
| Show the class carrots, sweet potatoes, and beets cut in half. Have the class examine what they look like and then suggest new names for them based on what they do/look like. Then have the class try the vegetables raw and see which ones they like.  |
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| Talk IT OVER |
|  **Reflect:** |
|  Are roots important for the plant? Are roots healthy to eat? Do all roots look the same? |
| **Apply:** |
|  Go to the grocery store and look at vegetables. How many roots do you see? Ask at home for different recipes that include root vegetables in them. Plant a seed in a clear plastic cup to see the roots growing! |
| ENHANCE/Simplify |
| **Enhance for Older Children:** |
| Let the older children identify on the board other roots that we can eat. Ask them how roots can be prepared/cooked usually. Are most roots eaten raw?  |
| **Simplify for Younger Children:** |
| Limit the tasting to just carrots because children are familiar with this vegetable. Let the children feel the roots that we eat for a long time and suggest new names for them.  |
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| HELPFUL Hints |
| Children will need help coming up with roots that we eat unless they are advanced. Choose a couple of children to act out the parts of the plant. Seeds will sit in a tight ball, roots will act like a straw, stems will move up and down like an elevator, flowers will look at the sun, Fruits will hold the seeds and Leaves will Make the Food like a chef.  |
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| ADDITIONAL Web LINKS |
| <http://www.dhs.wisconsin.gov/publications/P0/P00228.pdf><http://www.mnn.com/food/healthy-eating/stories/root-vegetables-101-a-primer-on-the-most-underappreciated-produce><http://classroom.hiddenvilla.org/curriculum/curriculum-for-your-school-garden/first-grade/the-root-show> |

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