Lesson Plan: Rethink, Kindergarten

Activity

Growing food from kitchen food scraps. Don’t toss it – plant it!

Introduction

Many of the scraps left over from the fruits and vegetables that we eat (at home and at school) can be used to start your own garden. Growing our own food is a great way to encourage healthy eating and establishes a sense of accomplishment as children watch something that they have taken care of grow and thrive. In this lesson, students will be challenged to Rethink how they view food scraps to encourage a circular approach to waste management, where resources are continuously used rather than being thrown away. Students will see how something they often see as waste turn into something they can later replant or eat!

Curriculum Connections

The Kindergarten Program, 2016 (revised)

Overall Expectations

- 6. Demonstrate an awareness of their own health and well-being
- 13. Use the processes and skills of an inquiry stance (i.e., questioning, planning, predicting, observing, and communicating)
- 29. Demonstrate an understanding of the natural world and the need to care for and respect the environment

Learning Objectives

1. Define food scraps
2. Explore how new food can grow from food scraps
3. Identify that Rethink as the first way to manage our waste
4. Rethink how food scraps are viewed and managed
5. Explore food scraps as living plants that will continue to grow

Resources Provided (located in the resource folder)

- Waste Management Hierarchy

Materials Required

- One romaine lettuce head
- One celery stalk
- Two green onions
- Two carrots

The Regional Municipality of Durham - Waste Management Services
If this document is required in an accessible format, please contact schoolprograms@durham.ca

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- Scissors
- Knife
- Cutting board
- Water
- Several containers or jars for the vegetable scraps. This is a great opportunity to reuse materials that can be found in the blue box!

Activity Instructions

Beginning of activity

1. The classroom teacher will bring green onions, carrots, a head of romaine lettuce, and a celery stalk into the classroom. Students can be asked to bring in containers and jars from their blue box at home or these items can be supplied by the teacher.

2. Explore the vegetables with the class. Can they identify the vegetables? Have they tried eating them? Why is it important to eat healthy food? Are there any parts of these vegetables that we don't eat?

3. Introduce the term food scraps to the class.

   Food scraps are the parts of food items that we typically throw away rather than eat. Some examples of food scraps include fruit and vegetable peels, bones from the meat we eat, and eggshells.

4. As a class, list of examples of food scraps.

   To help guide the students, ask them to think about all the parts of food items that we don't typically eat. Do we eat every part of an orange, apple, or watermelon? Some examples of food scraps include orange peels, watermelon rinds, pepper seeds, fish bones, eggshells, apple cores, and banana peels.

5. Introduce the idea of **Rethink**.

6. Rethink is the first R when we think about how to manage our waste. For example, we often place our food scraps into the green bin or backyard composter as our first option of getting rid of these items. These items are then turned into soil that can be used in our gardens and on our lawns. While composting is a good option, rethinking using the green bin as the first option for our food waste can reduce the amount of items going into the green bin. Today we are going to explore another option for some of our food scraps that can help save money by providing nutritious (and delicious) food at home and decrease the amount of new items we need to buy from the store.

7. Explain that the class will be trying to regrow plants from food scraps including green onions, romaine lettuce, celery, and carrots. Regrowing food scraps helps to reduce the amount of food we throw away while providing healthy food for our bodies.

8. Before getting started, make predictions about the results of activity. Do you think all the food scraps will grow? How long do you think it will take to see new growth? What do you think will start to grow first?
9. Prepare the food scraps with the class using the instructions provided at the bottoms of this activity.
10. Working together as a class, record your observation every other day. Take note of the size, colour and any new parts of the plant that are visible.
11. Snip some of the new growth and have students make observations including smell, taste, colour, size, etc.
12. After the plants have grown roots, they can even be planted into soil and grown into full plants.

Lettuce, celery, and green onions

1. Bring in a romaine lettuce head, celery stock, and green onions with the bottom end still intact.
2. Cut the items about one inch from the bottom of the stock/bulb.
3. Students may try tasting the lettuce and celery, saving any remaining lettuce and celery for another snack or meal.
4. Place the base of the lettuce and celery into a shallow bowl of water. Do not fully submerge.
5. Place the container in a well-lit area and change the water every one to two days.

Carrots

1. Bring in a carrot and cut a one-inch piece from the top.
2. Students may try tasting the carrots, saving any remaining carrots for another snack or meal.
3. Place the tops in a container of shallow water, cut side down. Do not fully submerge.
4. Place the container in a well-lit area and change the water every one to two days.

Summary

Rethinking how we view and manage food scraps is a great circular approach to waste management, where resources are continuously used rather than being thrown away. By regrowing food scrapes, we can change how we view and managed these items - from waste to usable food that we can eat and enjoy!

Expanded Curriculum Connections

The Kindergarten Program, 2016

6. demonstrate an awareness of their own health and well-being

- 6.1 demonstrate an understanding of the effects of healthy, active living on the mind and body (e.g., choose a balance of active and quiet activities throughout the day; remember to have a snack; drink water when thirsty)
- 6.2 investigate the benefits of nutritious foods (e.g., nutritious snacks, healthy meals, foods from various cultures) and explore ways of ensuring healthy eating (e.g., choosing nutritious food for meals and snacks, avoiding foods to which they are allergic)

13. use the processes and skills of an inquiry stance (i.e., questioning, planning, predicting, observing, and communicating)

- 13.1 state problems and pose questions in different contexts and for different reasons (e.g., before, during, and after inquiries)
- 13.2 make predictions and observations before and during investigations
- 13.3 select and use materials to carry out their own explorations
- 13.4 communicate results and findings from individual and group investigations (e.g., explain and/or show how they made their structure; state simple conclusions from an experiment; record ideas using pictures, numbers, and labels)

29. demonstrate an understanding of the natural world and the need to care for and respect the environment

- 29.2 describe what would happen if something in the local environment changed (e.g., if trees in the park were cut down, if the pond dried up, if native flowers were planted in the school garden)
- 29.3 identify ways in which they can care for and show respect for the environment
- 29.4 participate in environmentally friendly experiences in the classroom and the schoolyard (e.g., plant and tend to plants; use local products for snack time; properly sort recycling)