



Going Green Lesson Plan

Overview

Raddish is designed by a dedicated team of teachers and chefs who believe the kitchen classroom is the tastiest place to learn. We love watching learning come alive when kids mix match, stir science, and taste culture!

Paired with the materials found in your Going Green box, this lesson plan divides the material into 4 60-90 minute lessons to support your homeschool study. Each lesson includes a recipe and an activity. Depending on your timeframe and child's engagement, these can be taught together or separated for a longer lesson. Please refer to the curriculum provided in your box: recipe guides, activity cards, skill card, and introduction card. Happy cooking! Happy learning!

Lesson 1 – Smoothie & Breakfast Sandwich / Grow Green Activity

Learning Outcomes

- Students will identify different attributes of an avocado.
- Student will discover why vegetables are great for the body.
- Students will learn to properly wash produce.
- Students will create a healthy and delicious Go Green! Smoothie and protein packed breakfast sandwich.
- Students will become botanists as they plant, water, observe and record herb seedlings over the course of 4 weeks.

Instructional Materials

- Go Green! Smoothie and Breakfast Sandwich recipe guide
- Ingredients and tools to make the Go Green! Smoothie and Breakfast Sandwich
- Cleaning Produce skill card
- Grow Green activity card
- Seeds
- Expandable soil pod
- Egg carton, washed and rinsed avocado shell or other small container

Introduction (10 minutes)

Question: Introduce the lesson by asking students what fruit or vegetable best describes them.



Discussion. For example: I am like a coconut – hard and strong on the outside, but sweet on the inside.

Q. A fruit is the edible part of the plant that contains the seeds. A vegetable is the edible stems, leaves and roots of the plant. According to these descriptions, is the avocado a fruit or vegetable?

D. Avocados are classified as a fruit because they are the edible part of the plant that contains the seeds. However, according to law avocados are also a vegetable! In 1893, the US Supreme Court ruled avocados to be legally a vegetable because they are eaten with the main part of the meal instead of at the end with dessert.

Q. What are some fun facts about avocados?

D. Have the students review the guide and take turns sharing facts about avocados.

Q. Why do avocados turn brown when cut?

D. Avocados contain an enzyme, called polyphenol oxidase. When avocados are cut, the enzyme is exposed to oxygen in the air, which causes it to brown. Sprinkling citrus juice (lemon, lime or orange) can slow down the discoloration.

Pre-cooking (5-10 minutes)

Wash Hands: The first ingredient in every recipe is washing hands. It's important to wash hands with soap for 20 seconds under warm water. A fun way to pass the time is to sing "Happy Birthday" or the "ABC" song twice.

Mise en Place: Start the lesson by defining the word mise en place. Mise en place is a French word that means "putting in place." It is a culinary term used in professional kitchens that refers to preparing (chopping & washing) and organizing ingredients prior to cooking.

Skill Card: Washing Produce: Share with the students that it's important to wash produce prior to cooking as produce carries bugs and other pesticides that are unhealthy for our bodies. Review the skill card with the students and explain the proper way to wash each produce listed.

Recipe Guide (30-45 min)

Have each student take turns locating ingredients and tools for the Go Green! Smoothie and Breakfast Sandwich. Wash produce and follow the steps outlined in the recipe guide. Taste and share!

Eat and clean up. Be sure everyone participates.



Planting (20-30 minutes)

Start this lesson by defining the word botanist. A botanist is a biologist that studies plants. Students will become botanists as they plant Red Velvet Basil. Over the next 4 weeks you will observe the growth of the seeds and record the data, or information, on the back of this activity card.

Follow the planting directions on the front of the Grow Green activity card.

Estimate, or guess, when the students think the seed/s will poke through the soil and record it on the back of the activity card.

Have the students record the date on day 1 then draw a picture of their plant.

Complete the dates on the activity card then assign each student a date/s so they remember when to observe and record the plant's growth.

Lesson 2 – Zucchini Risotto in a Recycled Lemon Cup / The Importance of Recycling

Learning Outcomes

- Students will learn about recycling.
- Students will identify different ways to reduce, reuse, recycle in their daily lives.
- Students will follow the proper technique for creating a delicious and creamy risotto.
- Students will learn to make recycled lemon cups and lemonade.

Instructional Materials

- Zucchini Risotto in a “Recycled” Lemon Cup recipe guide.
- Ingredients and tools to make the Zucchini Risotto in a “Recycled” Lemon Cup recipe guide.
- Additional lemons for the refreshing lemonade recipe.

Introduction (15 minutes)

Introduce the lesson by having the chefs guess the “secret ingredient” by playing the game 20 questions. Chefs can only ask “yes” or “no” questions to guess the secret ingredient. Examples include: Does it grow on a tree? Is it red? Does it have seeds? Is it a fruit?

Q. What does it mean to reduce, reuse and recycle (aka the 3 Rs)?

D. *When people throw items away, the items are sent to landfills where it takes centuries to decompose, or break down, completely. The 3 Rs are a way for*



people to help minimize waste. **Reduce** means to reduce consumption or buy less. For example: use steel silverware instead of plastic silverware. Use glass or reusable water bottles instead of plastic ones. Rather than throwing out items like food jars or clothes, **reuse** them for storage or donate them to a shelter. **Recycle** means to convert used materials into new products to save resources and energy. Instead of throwing away plastic bottles and soda cans you can recycle them at a local drop-off center or in your neighborhood if your community provides this service.

Q. What are some ways we recycle around the house?

D. Examples include: Recycling plastic bottles, soda cans and other containers. Reusing plastic bags, buying rechargeable batteries, and purchasing eco-friendly products.

This is a great resource for the Top 10 Ways to Recycle via KidzWorld:
<http://www.kidzworld.com/article/26804-top-10-ways-to-recycle>

Recipe Guide (45 minutes)

Remind students that the first ingredient in every recipe is washing hands.

Have each student take turns locating ingredients and tools for the Zucchini Risotto in a “Recycled” Lemon Cup recipe.

Start the lesson by assigning each student a mise en place task. For example: have one student cut the onion (**this video is a great resource:** <http://www.wimp.com/choponion>), one student grate the zucchini, one student cut and juice the lemons, one student measure the stock, rice and cheese.

Follow the steps in the Zucchini Risotto in a “Recycled” Lemon Cup recipe guide.

As the risotto is cooking, students can learn how to turn lemons into recycled serving cups. With parent supervision, follow the instructions in the Zucchini Risotto in a “Recycled” Lemon Cup recipe guide.

Use the leftover lemon juice to make a refreshing lemonade, which can be downloaded from our Going Green extension page:
<http://raddishkids.com/pages/goinggreen>

Taste and Share!

Eat and clean up. Be sure everyone participates.

Reminder: Be sure to check your seeds. Have any sprouted yet?



Week 3 – Save the Trees! Broccoli Forest Salad / Family Band Activity

Learning Outcomes

- Students will learn different characteristics of broccoli.
- Students will learn 8 reasons why trees are important to the environment.
- Students will create a delicious and healthy broccoli salad.
- Students will create a recycled box guitar and other instruments out of recycled materials.
- Students will learn how sound varies among the instruments.

Instructional Materials:

- Save the Trees! Broccoli Forest Salad recipe guide
- Ingredients and tools for the Save the Trees! Broccoli Forest Salad recipe guide
- Raddish box
- 4 rubber bands
- scissors or box cutter
- 2 pencils or wooden chopsticks
- beans or rice
- masking tape
- stickers for decorating box

Introduction (10 minutes)

Introduce the lesson by having the students play detective. Read the following clues to see if they can unveil the secret ingredient.

1. I come in green and purple.
2. I originally came from the Mediterranean and Asia.
3. Cauliflower and cabbage are my cousins.
4. I am the happiest in the winter months.
5. I help fight cancer!
6. I was once known as the Italian Asparagus.
7. My leaves are very bitter but you can eat them.
8. I was named after a part of your body...your ARM!
9. You usually eat the part of me that is the flower.
10. If you eat me, I will make you big and strong!
11. I am a vegetable.
12. I can be boiled, steamed, sautéed, stir-fried, and even eaten raw.

Q. What do we know about trees? Why are they important to our daily lives?



D. Trees absorb carbon dioxide and provide oxygen into the air we breathe. Please refer to other ways trees are important to our environment in the Save the Trees! Broccoli Forest Salad recipe guide.

Q. What do you know about green vegetables? What is your favorite green vegetable?

D. Green vegetables are great for your body because they have vitamins and minerals that help you grow healthy and strong. Allow students to respond with their favorite green vegetable.

Recipe Guide (30-45 minutes)

Remind students that the first ingredient in every recipe is washing hands.

Have each student take turns locating ingredients and tools for the Broccoli Forest Salad! Save the Trees recipe guide.

Start the lesson by assigning each student a mise en place task. For example: have one student cut the broccoli crowns, one student dice the red onion, one student measure the ingredients, etc.

Follow the steps in the Broccoli Forest Salad! Save the Trees recipe guide.

Taste and Share.

Eat and clean up. Be sure everyone participates.

Begin creating the box guitar (30-45 minutes)

Introduce the lesson by sharing that today we are going to make instruments out of recycled materials.

Q. What materials in our home would make good instruments?

D. Paper towel roll, toilet paper roll, plastic containers with lids, etc.

Follow the instructions on the Family Band activity card. Be sure to have an adult cut the hole for the box guitar. If you have time, make all 3 instruments -- the more variety the better!

Once the instruments are made, follow the instructions on "The Band is in Session" activity card.

Q. How does the sound vary among the instruments? Is one higher than the other? Which sound is your favorite? Which instrument is your favorite? Try



putting a third pencil along the length of the box. Does that change the sound when you play?

Reminder: Be sure to observe, water and record your seeds' progress. Have any sprouted yet?

Lesson 4 – Perfect Pesto / Repotting

Learning Outcomes

- Students will identify and compare fresh herbs using their 5 senses.
- Students will make a delicious and healthy pesto.
- Students will learn how to transfer plants from one container to another.

Instructional Materials:

- Fresh herbs such as basil, mint, rosemary, dill, thyme
- **Perfect Pesto recipe, available for download on the Raddish extension page: <http://raddishkids.com/pages/goinggreen>**
- Ingredients and tools to make the Perfect Pesto
- Container at least 6" in diameter with holes for water to drain
- Potting soil

Introduction (15 minutes)

Start the lesson by conducting a blind taste test. Have the students cover their eyes and use their 5 senses to guess the secret ingredient.

Q. Herbs make food delicious! They provide flavor, enhance taste, improve a dish's overall quality, create visual appeal, etc. What is your favorite herb?

Q. Introduce various types of herbs then have students observe the herbs using their senses. Taste, touch, look at the herbs. How are they the same? How do they differ?

As the chefs smell, taste, and identify the herbs, ask if they are reminded of any dishes or holidays. (For example: thyme >> Thanksgiving)

Begin Cooking (30 minutes)

Remind students the first ingredient in every recipe is washing hands.

Have each student take turns locating ingredients and tools for the Perfect Pesto recipe.

Start the lesson by assigning each student a mise en place task. For example: have one student wash and dry the basil leaves (using the washing vegetables



skill card for reference), one student measure the cheese, salt, pepper, and pine nuts.

Follow the steps in the Perfect Pesto recipe.

Eat and clean up. Be sure everyone participates.

Repotting Activity (20 minutes)

During week 4, your seedlings will begin to develop roots, which means it's time to transfer your plant to a larger container. Be sure to select a pot that's at least 6" in diameter, with drainage holes on the bottom.

Have the students fill the container with potting soil until it's almost full then dig a small hole in the center of the container.

Have the students place the herb plant in the center of the container then gently press the soil around the plant.

Have the students water the soil thoroughly. If needed, add more soil to the container so only 1 inch remains between the top of the soil and the top of the container.

Place the plant in a sunny area and watch it grow!