

Lesson 1: Plant a Seed

SCARLET CAMPERS

Lesson Created by: Jennifer Campbell Reviewed by: Alison H. Brown, M.S., R.D.N.

Lesson Overview:

In this lesson, campers will learn about the concept of seed-to-plate for a melon. Campers will start by personalizing a planter and planting a melon seed. Next, they will learn more about three types of melons and how they grow (watermelon, cantaloupe, honeydew). The lesson will end with campers performing a taste test of all three melons and sharing their melon preference with the group.

Behavior Change Objective:

As a result of this lesson, campers will apply the concept of "seed to plate" to choose more unprocessed/whole foods to put on their plate.

Learning Objectives:

After participating in this lesson, campers will be able to:

- List the steps of planting a seed
- State at least one fact about melons
- Define the concept of "seed to plate"
- Verbalize their preference for melon types

Key Words:

gardening, seed to plate, farm to table, watermelon, cantaloupe, honeydew, melon, nutrition

Before you Begin:

- Gather materials including:
 - Whole melons for display watermelon, cantaloupe, honeydew (yellow canary melon - optional)
 - Cut melon for tasting watermelon, cantaloupe,
 honeydew (*Plated by type*)
 - Peat pots (1 per camper)
 - Large bag of potting soil

- Permanent markers, assorted colors, for decorating pots
- Melon seeds (2 per camper)
- Paper plates, napkins, and forks for tasting
- Plastic cups (2-4) for scooping soil



Ingredients:

- Whole melons for display watermelon, cantaloupe, and honeydew
- Cut fruit for taste testing watermelon, cantaloupe, and honeydew

Materials:

- Biodegradable peat pot (1 per camper) label optional
- Solo cups (to add dirt to planters)
- Permanent markers, assorted colors, or decorating pots
- Large bag of soil
- Melon seeds (2 per camper) watermelon, cantaloupe, honeydew, yellow canary melon
- Paper plates, napkins, forks

Lesson Procedure and Script:

Note: included in this section are a draft script and talking points. Feel free to add your own personal flare to the lesson. And more importantly, have fun!

1. Introduce yourself. Have campers wash their hands as they enter, and ask icebreaker questions during the process.

"Make sure to wash every part of your hands with soap!"

"Have any of you ever grown a plant or planted a seed before? What kinds of things come from seeds? Why do you think knowing how to grow plants matters? What do plants have to do with the fruits we see here on the table?" *Point to melons*.

"Today we're going to decorate planters and plant melon seeds! I made this one earlier," *Hold up completed planter* "and I can't wait to see yours!"

2. Review class attention grabber method:

"During our lessons, we are going to be doing hands-on activities, and there are going to be times when I will need you to stop what you are doing and pay attention to what I am saying. How many of you know *clap 2X slowly, then 3X quickly* call and response? Great, for those of you who haven't done this before, every time I need us to stop what we're doing I'll clap like this *clap 2X slowly, then 3X quickly* and everybody will clap back like *clap 2X slowly, then 3X quickly*.



Lesson Procedure and Script (continued):

Some of the activities we are doing involve dangerous steps- so it's very important that when I clap you all clap back. Let's practice!" Important- practice until <u>everybody</u> responds. If some campers aren't joining in, say that we'll move on when we have 100% participation. Stay positive and don't name names, just keep going until everyone joins in. Here's a great video on how to use this strategy. https://www.youtube.com/watch?v=r2AOANPXTNY

3. Conduct melon taste test.

Set out plates with different melon types, provide students with forks and napkins

Great! Before we start planting our seeds, we're going to discover our favorite kind of melon together! I would like for you to try each kind of melon and then we will share which type we liked best."

Provide cut melon to students and give them time to taste each type. Show them whole fruits before each type. Cut melons open to show flesh.

Then either have campers volunteer to share which one is their favorite or take a class vote.

4. Have campers label and decorate their planters:

"Great! Now I'll show you how we're going to customize our planters. These planters are special since they are biodegradable, which means they will easily break down into the soil. You can use markers to decorate your pot however you want, but first I would like everyone to label their planters with their name, the date, and what kind of seed you will be planting. We have cantaloupe, watermelon, honeydew, [and yellow canary melon]. We will decorate while we learn more about melons, then we'll plant our seeds."



Talk while demonstrating how to label- "So I would like everyone to get their planters and a marker ready. Write your name, the date, and whatever kind of melon you want to grow on the label. Does everybody have a label? Great! Go ahead and decorate and we'll do a little Q&A while you get creative. We're going to take 10 minutes to decorate in class, but you can always add more to it when you get home."

Students will decorate their planter bases (steps 1-2) while we do Q&A. (see attached)

After 8 minutes do a time check with students: "We have two minutes left to decorate, so finish what you can, and we'll move on to planting our seeds."

After 10 minutes transition to planting: "Alright, that's all the time we have to draw, let's put our markers away and start planting!"

Seed to Plate - Q&A:

Display a watermelon, a cantaloupe, and a honeydew melon.

Q: "Who can tell me the name of this fruit?" Point to each type of fruit, and allow for students to name each melon.

Q: "Can you think of words to describe a watermelon?" Repeat with cantaloupe and honeydew.

Q: How do you think these fruits got their names?

A: The watermelon plant (C. lanatus) produces fruit that is about 93% water, making water the majority of the fruit. Hence "water" melon.



Seed to Plate - Q&A (continued):

Q: How do these melons grow?

A: Melons start from seeds which germinate into seedlings. The seedlings grow into vines, which have tendrils. Tendrils are small, thin stems that curl and twist around objects to help the vine move into the sunniest spots. The vines make flowers, and the flowers can be male or female. The flowers get pollinated (which means the pollen goes from one flower to another), and the flowers swell up to become fruit- in this case, melons!

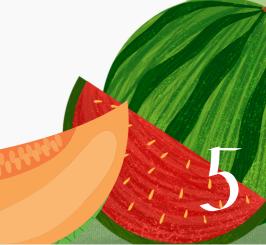
Fun fact: There are some vegetables that are actually flowers! Broccoli, artichoke, and cauliflower are all flowers.

Q: In what season do these melons grow?

A: They start in early summer and are ripe by early fall. There are farms that grow melons all over New Jersey, and some will even let you pick your own melons!

Q: Has anyone heard of seed to plate? How about farm to table? What do you think these phrases mean?

A: Seed to plate means knowing about how plants grow from seeds to the foods we eat. It's interesting to think about where your food comes from, and when different foods are in season. Farm to table can mean buying foods right from a local farm or farmer's market instead of from a store. If food has to be shipped from far away, sometimes it's picked before it's all the way ripe and it finishes ripening on the way to the store. If fruits and vegetables are allowed to get all the way ripe before they're picked, they taste better and are more nutritious.



BBBa.



Lesson Procedure and Script (cont.):

5. Have student assemble their plants in their decorated planter:

"Now we'll assemble our planters: First, we'll fill our planters to the top with soil. We'll scoop it out of the bag with the planter, (or you can use your hands if you don't mind getting them dirty!) and put the soil in until it's full to the top, but not overflowing.

Next, we'll gently press down or "compact' the soil- that makes our baby plants feel safe and secure. Then, we'll poke a hole in the soil, about an inch deep.

Then we'll put two seeds of the same kind in each hole- so just in case one seed doesn't grow, you have a backup. Then you'll want to cover the hole with soil and gently press down. Seeds sprout best if the soil isn't too loose or too compact- you want the soil to touch the seeds all sides but not smush them.

Last, we'll water our seeds. Gently pour in water until the soil is moist, but not soggy. Excellent! You've just planted your own crops! Keep your seeds outside in a sunny spot or on a windowsill, and water them every day. Melons love the sun and moist soil. They should sprout in 4-10 days. You can look online for tips on how to grow your melon in the yard or in a container, and you could have your own seed to plate melon by the fall!"

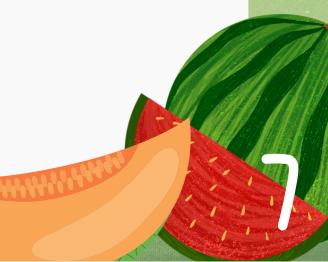
6. Clean up station and have student wash their hands, then thank campers and end the lesson.

"Thank you for participating in today's lesson where we planted a seed and learned more about melons. Remember at home you can also eat seed-to-table by shopping at local farmers markets or by growing your own food in a home garden. Whole foods, like melon, are good fuel for our body and keep our planet healthy."



<u>Hands-on Activity Outline - How to Plant a</u> <u>Seed:</u>

- 1. Kids: Label your planter with your name, the date, and what kind of seed you planted.
- 2. Kids: Decorate the planter with markers.
- 3. Kids: Fill the container with soil using a cup (or hands!).
- 4. Kids: Gently press down the soil.
- 5. Kids: Use a sharpie or your finger to poke a hole in the soil about 1" deep
- 6. Kids: Put 2 seeds in the hole.
- 7. Kids: Cover the hole with soil and gently press down.
- 8. Kids: Wet soil using cups.
- 9.Adults: Tell kids to place their plants on a windowsill or outside and water them every day, and they will see sprouts in 4-10 days!



11111