

Brussels Sprouts Chips



GUIDING QUESTIONS

Why do the Brussels sprout leaves need veins? Do people also have veins? What moves around in our veins?

1. WASH HANDS (5 minutes)

Ask students to wash hands. Divide them into three groups and assign each group to a table. Reiterate safety rules for using the Charlie Cart.



2. INTRODUCE THE LESSON (5 minutes)

Today we will make crispy, salty chips! But instead of using potatoes or tortillas to make our chips, we're using a surprising ingredient –Brussels sprouts! These chips are crispy, salty, and delicious!

Brussels sprouts are a tiny little bud of a plant with many leaves folded tightly over one another. I wonder how many leaves there are in a single Brussels sprout? Maybe we can find out! These little plants are full of vitamins and nutrients that help us grow. [Show sprout and pull off one of the leaves.]

This is the leaf of the plant. How does the leaf help the plant to grow? (It absorbs sunlight and turns it into energy for the plant. This is called “photosynthesis.”) [Point out the tiny veins.] These are the veins of the plant. Water travels through these veins to help the plant grow. We also have veins. What travels in our veins? Some plants, like kale, have a tough vein, which we remove before cooking. That is called “deveining.” The vein of the sprout is so small, we do not need to remove it.

To make our chips we will peel the outer leaves off the sprouts and discard them into the compost. Then we will peel the rest of the leaves from the sprout, add some olive oil, and roast them in the oven to make them crisp. At the end, we will add some salt to bring out the flavor.

Each of you will have a chance to help prepare the sprouts, and try them when they're cooked.

3. MAKE BRUSSELS SPROUTS CHIPS

(20 minutes)

Read the recipe aloud with students.

PREPARE THE SPROUTS

- Distribute sprouts and explain that they have been washed and ends trimmed ahead of time.
- *Why do we wash produce before cooking and eating it?* (Produce grows in the ground and sometimes has a little soil on it, so we need to clean it.)
- Show how to peel sprout from the bottom.
- *Try to keep the leaves whole. Set one leaf aside to investigate later. Put the rest into a mixing bowl.*
- *When you get to the center of the sprout, you might not be able to peel any more leaves. We can compost the rest.*
- *The leaves need to be absolutely dry in order for the sprouts to get crispy in the oven. If any of your leaves are wet, pat them dry with a paper towel.*

INVESTIGATE THE LEAVES

- *When all leaves are peeled, look at the leaf you saved for yourself. Trace the veins with your fingers. What is transported through this network of veins? (Water and nutrients.) Where does the water come from? (From the ground, through the roots)*
- Ask students to eat the leaf and describe the taste.
- (Adult) At the table, measure the olive oil into the bowl of sprouts.
- (Students) With clean hands, take turns to rub the oil into the sprouts.
- (Adult) Arrange leaves on the two baking sheets.

ROAST BRUSSELS CHIPS

- Set the oven to 350°F, convection OFF.
- Roast on the top and bottom racks for 12 minutes, stirring the leaves and swapping position of baking sheets halfway through, until the edges of the leaves begin to brown (leaves will crisp as they cool).
- Remove from oven and sprinkle with 3/4 teaspoon salt per baking sheet.

WHILE CHIPS ARE ROASTING EXPLAIN COMPOST

During every Charlie Cart lesson, we have a compost bowl on the table. Does anyone know why? (For parts of plants we don't eat.) What is compost? (It is a way of reusing and recycling the scraps from our food.)

Let's imagine we are the outer leaves of the sprouts, traveling to the compost. What will happen to us? Let's look to nature for an example. In the forest, leaves fall to the ground and cover the soil.

Over time, more leaves fall and create a thick blanket called "mulch." What happens to those leaves? They decompose. Their outer structure falls apart and their valuable nutrients are absorbed into the soil.

Now, back to our sprouts! We put the leaves in this bowl, and then into a green bin especially for compost. There is a lot of food in there, and it is decomposing—it is rotting! How might it smell?!

The compost bin full of fresh food scraps is mixed at the recycling plant with dirt and, over time, the scraps decompose and become a rich food for soil and plants. It takes a special mix of dirt and food to make compost, so we can't throw food out into the backyard and expect it to become nice soil.

Use the attached worksheet to reinforce the concept of how compost works.

Challenge: Use the drawing on the board to explain how compost works. Now ask students to draw their own version of what will happen to the sprout trimmings that we added to the compost.

4. EAT AND DISCUSS (10 minutes)

When all table groups have completed their activities, clean and set tables to eat. Serve chips. Students may add a squeeze of lime if they like. Ask students to **wait patiently** until everyone is served.

5. CLEAN UP (5 minutes)

The compost cycle

Word bank

Harvest

Scraps

New soil

Compost

