Lesson Plan

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 (10 minutes)

Today we will make an herb and cheese frittata. “Frittata” is like a baked omelet that can be made with many different types of vegetables and cheese—whatever you like best. Usually frittatas are bigger, but we are preparing muffin-size frittatas so you can each have your own.

To make a frittata, we will crack eggs, tear herbs, grate cheese, add spices, and whisk it all together. Then we will bake it in the oven. The oven uses “dry heat” to cook the eggs. Why do you think it’s called that? (It does not give off any moisture.) It’s important that you do not eat any raw eggs while we work. We have to wait for them to be cooked.

What will happen to the eggs when they are baked in the oven? The properties of the eggs—such as color, texture, and smell—will change when heat is applied. They will harden, change from liquid to solid, change color, and smell differently. The herbs and cheese add flavor and nutrients to the frittata. What will happen to the cheese when it is baked? (It will also transform—it will melt.)

You will work together to make your table’s frittata mixture. Then I’ll put them in the oven and we’ll predict what the frittata will look like when it’s done.

Guiding Questions

Why did the eggs change when we cooked them? What changes took place? Can they return to their raw form once they have been cooked?
3. MAKE MINI HERB FRITTATA (30 minutes)

Ask students to read the recipe aloud.

PULL HERBS

- Which part of the herb do we eat? (The leaves!)
- Remind students how to pull leaves from herbs and how to chop or tear into tiny pieces with tot knives, scrapers, or fingers.
- “Tiny pieces” means the size of a ladybug.
- While tearing herbs, ask students to taste them, and describe and compare the flavors. Place the herbs in a prep bowl and toss until all three herbs are mixed well.
- Place stems in the compost bowl.

GRATE CHEESE

- Show students how to use the grater safely, by working in pairs. One student holds the handle firmly with one hand and grates. The second student is the “eyes” of the project, making sure the person grating does not grate too close to his or her skin. When there is just about 1 inch of cheese left, STOP grating. The end of the cheese can be broken up by hand and added to the grated cheese or eaten as a snack.
- Caution students: Never touch the holes (blades) of the grater. Hold the grater by the handle and tap the bottom gently onto the cutting mat to release anything caught inside.
- Place grated cheese in a prep bowl.

CRACK EGGS

- Show students how to crack an egg: hold the egg firmly in one hand and bring it down gently, but quickly onto the edge of a mixing bowl.
- Open the shell by holding each half in one hand, to allow the egg to slip into the bowl.
- Set eggshells aside in a large bowl. Be sure to set the cartons aside in a clean, dry place.
- Check for shell pieces in the bowl.

- Show students how to extract shell pieces: using one half of the cracked egg as a scoop, pull the pieces out one by one.
- Work in pairs: one student will crack the egg; the other will scoop out any shell.

ADD SEASONINGS AND WHISK

- Take turns measuring the paprika, salt, and pepper, and add to the egg mixture.
- (Adult) Demonstrate in the air how to gently whisk eggs.
- Take turns whisking into the eggs.
- Measure 1 cup chopped herbs and whisk into the eggs.
- Add the grated cheese and whisk again.

FILL BAKING CUPS

- Bring baking sheets, with baking cups arranged evenly, to tables. There are only 2 baking sheets, so one table will wait.
- Students take turns measuring approximately 2 tablespoons of the egg mixture into the cups. Bring baking sheets to oven.

BAKE FRITTATA

- Set oven to 375°F, convection ON.
- Use 2 baking sheets, up to 15 baking cups per sheet. Bake on 2 racks, top and bottom.
- Set timer for 8 minutes. At 8 minutes, swap position of baking sheets. Reset the timer for an additional 8 minutes.
- When done, remove baking sheets from the oven and remove frittatas from baking sheets to cool.
WHILE FRITTATA IS COOKING, MAKE EGGSHELL HERB GARDENS

- Set a bowl of water in the sink at the cart, and another at the classroom sink (if available). Alternatively, set medium-size bowls, filled halfway with water, at the tables.
- Show students how to rinse their eggshells by gently swirling them around in the water. Remove shells from the water and dry gently with a paper towel.
- If there are not enough half-eggshells left intact, plant directly into the egg carton.
- Help students to line the bottom of the egg carton with either a clean half eggshell or several pieces of broken eggshell, enough to cover the bottom.
- (Students) Fill the eggshell or carton compartments about three-quarters full with soil—one compartment per student. Use an indelible marker to mark student names at their spot on the egg carton.
- Demonstrate how to gently place 2 to 3 seeds into the soil. Students can take turns to plant their seeds.
- Place the herb gardens in a sunny window. Water very lightly with a spray bottle every day. If no spray bottle is available, use ¼ teaspoon of water every other day.

The emerging plants can be transplanted into the garden, along with the eggshell, as soon as they are about 1 inch out of the soil.

4. EAT AND DISCUSS (10 minutes)

Clean up and set tables to eat. Serve frittatas warm, right in the baking cup. Ask students to wait patiently until everyone is served.

DISCUSSION QUESTIONS

Ask students to share some of their predictions about what the frittata would be like.

Were their predictions correct? What was different?

Ask students to describe the difference between the raw, whisked eggs and the cooked frittata.

5. CLEAN UP (5 minutes)

ADDITIONAL RESOURCES

For photos and more information on eggshell herb gardens: www.gardenbetty.com/2011/08/starting-seeds-in-eggshells-cute-and-yes-even-practical
Mini Herb Frittata

You will need: 10 silicone baking cups or a muffin tin and paper baking cups.

INGREDIENTS
Note: Use organics whenever possible.

- ½ bunch parsley
- ½ bunch basil
- ½ bunch cilantro
- ½ pound Cheddar cheese
- 5 eggs
- ½ teaspoon paprika
- 1 teaspoon kosher salt
- ¼ teaspoon ground pepper

PREPARATION

1. Preheat oven to 375°F. Fill muffin tins with paper baking cups, if using.
2. Wash the herbs and pat dry. Pull off the leaves and chop into tiny pieces (the size of a ladybug). Place in a mixing bowl and toss until herbs are combined.
3. Grate the cheese on the large holes of a box grater.
4. Crack the eggs into large mixing bowl. Remove any shell from the eggs. Whisk until combined.
5. Whisk in the paprika, salt, and pepper.
6. Measure 1 cup of the herbs and add to the egg mixture. Whisk to combine.
7. Add the grated cheese to the egg mixture and whisk again.
8. Fill each baking cup with 2 tablespoons egg mixture.
9. Bake for 16 minutes, or until puffed up and firm on top. When done, remove from oven and transfer baking cups to a rack to cool slightly.

Remove frittatas from baking cups and serve warm or at room temperature.

VARIATIONS

- To make a large frittata, butter a 9 by 11-inch baking dish. Follow the directions above, adding 1 tablespoon water to the egg mixture and whisking thoroughly. Pour the egg mixture into the buttered dish and bake for 20 minutes, or until puffed up and cooked through.
- Try a variety of cooked vegetables and cheese combinations in place of herbs.