Title: Garden in the Kitchen

<table>
<thead>
<tr>
<th>Grade: 2nd</th>
<th>Date of Delivery: 180813</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit: Seed-to-table</td>
<td>Recipe: Pesto; Herb crackers</td>
</tr>
<tr>
<td>Time: Two 45-minute classes</td>
<td></td>
</tr>
</tbody>
</table>

Unit overview and background information:
In 2nd grade we will explore the concept of seed-to-table cooking and eating, particularly as it relates to our school garden and kitchen class. Students will learn that food grows from seeds into plants, many of which we can find in our garden. Students will plant their own seeds, and as we observe the changing plant, we will also observe the changing garden and seasons. In addition, we will learn how the plants we eat are like medicine to keep us healthy, and that the more colorful plants we eat, the healthier we can be. The class will culminate with a meal made from the vegetables we planted at the beginning of the semester.

ESYNOLA Kitchen Core Concepts:
Seed-to-table
Culinary skills
Academic applications in the kitchen

Objectives:
SWBAT:
1. Plant a seed in kitchen class, and discuss why we would do so.
2. Visit the garden in the context of kitchen class and harvest herbs to be used in cooking that day.
3. Talk about what seed-to-table means, particularly in kitchen class.
4. Use their senses in cooking, and express how that makes them feel.

Assessment plan (formal or informal):
1. Round robin, “why are we planting seeds in kitchen class?”
2. Drawing of what seed-to-table means to the student.
3. Closing circles: “How did rolling out and poking holes in crackers make you feel?” “Show me the face you make when you smell basil or rosemary.”

Academic component: The concept of seed-to-table, paired with seasonality and regular trips to the garden, tie well with the 2nd grade unit, “seasons of change.” We will observe how the garden changes over time, as does the weather, and what we cook in kitchen class. Also, skip counting, addition and subtraction, and measurement will all be incorporated into lessons as appropriate.

Key Academic and Culinary Vocabulary (intentionally taught)

Seed-to-table - plants grow from seeds, and then we harvest and cook/eat them
Key Preparation/Materials:

Day 1:
- Seeds, soil, containers, and other materials for planting kale/collards (work with garden team)
- Check with garden team that 2nd grade can go to the garden to review garden promises and harvest rosemary
- Tools and ingredients for crackers ready
- Spice grinder out to grind rosemary

Day 2:
- Check with garden team that 2nd grade can go to the garden to review garden promises and harvest rosemary with kid scissors
- Tools and ingredients for crackers ready
- Spice grinder out to grind rosemary

Lesson Flow: Day 1

Driving Question: Why are we planting seeds in kitchen class? What is one plant from the garden that we can cook, and what can we cook with it?

Opening circle: (5 min)
- “Do we eat plants?” Thumbs up or thumbs down. We do! Around circle, “What is one plant we eat?”
- Today we are going to start growing our own plants to eat, and we will cook with a plant that is already growing.

Lesson Intro - Engagement/Inquiry: (20 min)
Students go to garden tables. Teacher explains that we are planting kale/collard green seeds, but also shows a variety of other edible plant seeds. “Why are we planting seeds in kitchen class?” (If guidance needed, “What is kale/what are collards?” “What is going to happen to these seeds?” “What do we do in kitchen class?”)

“Who remembers how to plant seeds?” Have one student demonstrate with a larger seed; encourage others to provide corrections or encouragement. “Now, the difference with our collard and kale seeds, is they are super tiny. So they need only the tiniest of holes. And we need to be careful with them. Everyone pretend you are holding a baby animal in your hand… (popcorn) What are you holding? How do we need to hold our baby animals? Imagine we are putting them to bed. Do they need big beds or little beds? And do they need a lot of blankets piled on top of them, or a little blanket?” We need to treat our baby seeds like those baby animals.

Demonstrate the size hole needed. Rally coach: Direct students to make the tiniest divots in the soil while their partner coaches, and vice versa. Give each student seeds and instruct them to put two in each hole. “Now what do we need to do?” And did our baby animal need a big blanket or a little one? Demonstrate putting the tiniest amount of soil over the seed. “We want our stem to be able to push up through that soil.” Rally robin: “Now what will our seed need in order to grow?”

Put popsicle sticks in planters and water plants.
**Body - Exploration:** (15 min)
Each group moves to the garden to harvest rosemary. At rosemary bush, each student picks a leave or two from a harvested branch and drops them in the spice grinder. While walking back to the kitchen, ask, “What do you see in the garden? What do you smell? What is the weather like?”

After returning to class, students wash hands and put on aprons. Students make cracker dough with pre-measured ingredients and grind rosemary. Teacher encourages students to compare amounts of each ingredient used. The dough is patted out by each student into a flat pancake on a floured surface. Each student then gets a plastic fork, and the group skip-counts by fours all together (“How many points does each fork have?” We are going to count how many holes we make, so we have to count 4, and then 8, and then….”)

Crackers are cut into smaller portions by teachers and put on baking trays.

**Students wash hands and take off aprons.**

**Closing - Final check for Understanding/Summarization:** (5 min)

Round robin: Say one word about how you felt when you were patting out your cracker dough.
Discussion: Why are we making rosemary crackers?

**Lesson Flow: Day 2**

**Driving Question:** What does seed-to-table mean?

**Lesson Intro - Engagement/Inquiry:** (5 min)

Opening circle:
- “How do you feel when you are in the garden?”
- There is a plant called basil in the garden. We are going to harvest some basil, and then make a sauce out of it, called pesto.

**Body - Exploration:** (35 min)

We are going to the garden again today, to harvest another herb. What herb did we harvest yesterday? Does anyone remember what we are going to harvest today?

Review garden promises; walk to garden to harvest basil. “What do you see in the garden? What do you smell? What is the weather like? Is this the same or different from yesterday?” At basil plant, “How long do you think this basil plant has been here? Has it been here forever? Think about what we did yesterday, and then think about this question, “How did this basil get here?” Whisper in your hand and throw.

Return to kitchen to wash hands and put on aprons.

Students pick basil (smell your basil -- how does the smell make you feel?), squeeze lemons, and then dump ingredients and push buttons on the food processor to make pesto. Students skip-count by twos to ten to know when their turn is over.
Students set table, pour water, and hand out crackers. Teacher scoops out pesto. Class sings song and eats.

Closing - Final check for Understanding/Summarization: (5 min)
“What we are learning about is called (write on board) SEED TO TABLE. Think about all of the things we did yesterday and today with seeds, plants, and food. Raise your hand if you think you have figured out what “seed-to-table” means. What do you think that means?” Timed pair share and share out.