Green Sauce
Around the World

THEME: PREPARING HEALTHY FOOD

ESSENTIAL QUESTIONS
How do different cultures use similar building blocks to create flavor in their foods?
How do we effectively balance flavors in a sauce?

LEARNING OBJECTIVES
✓ Students will be able to explain how people use similar foundational flavors across cultures.
✓ Students will be able to apply their understanding of balancing flavor profiles to a green sauce.

CONCEPTS
balancing flavors   herbs   sauce

MATERIALS
- Printed Recipe Cards (pp. 537-538) for five different green sauces (sauces made from green herbs)
- Ingredient Investigator Role Cards (p. 536)
- Blank Green Sauce Recipe Cards (p. 539)
- 6 red, yellow, green, blue, and purple pencils or highlighters for marking up recipes
- Ingredients to make a simple green sauce (see recipes listed at the end of this lesson)
- Large molcajete (mortar and pestle) or a blender
- 4–6 small bowls
- Pita bread or crackers for tasting
- Materials for cleanup

PREPARATION
› Choose which green sauce you’d like to prepare with your class. Consider which sauce might feature produce you have available in your school garden or locally, or which might be the most culturally and/or regionally relevant to your students. Note that the pesto, chimichurri, and chermoula will be best sampled on a cracker or piece of bread. Both the sofrito and the green curry paste benefit from being cooked further with whatever protein or vegetable they’re being served with.

LESSON DESCRIPTION
In this lesson, students study five different green-herb sauce recipes from various cultures and determine their commonalities and differences. The class then works together to create and enjoy one of these simple green sauces.

Engaging the Classroom Teacher
• Prior to the lesson, ask the teacher whether they have established groups of 4–6 students.
• During Action Steps 2 and 3, suggest that the teacher support students as they fulfill their roles in identifying various ingredients in their recipe.
• During Action Step 7, suggest that the teacher circulate through the room, supporting groups as they develop a green sauce recipe together.
Set up a cooking station in the room where groups of 4–6 students can gather.

Photocopy and cut out Ingredient Investigator Role Cards, so there’s a card for each student in each group.

**BUILDING BLOCKS FOR GREEN SAUCE**

<table>
<thead>
<tr>
<th>ALLIUM FAMILY</th>
<th>LEAFY HERBS</th>
<th>FATS</th>
<th>ACIDS</th>
<th>SPICES</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Garlic</td>
<td>• Parsley</td>
<td>• Olive oil</td>
<td>• Vinegar</td>
<td>• Salt</td>
<td>• Bell peppers</td>
</tr>
<tr>
<td>• Onion</td>
<td>• Cilantro</td>
<td>• Lemon</td>
<td>• Lime</td>
<td>• Pepper</td>
<td>• Tomatoes</td>
</tr>
<tr>
<td>• Shallots</td>
<td>• Basil</td>
<td>• Nuts</td>
<td></td>
<td>• Peppercorns</td>
<td></td>
</tr>
<tr>
<td>• Lemon grass</td>
<td>• Cheese</td>
<td></td>
<td></td>
<td>• Coriander</td>
<td></td>
</tr>
<tr>
<td>• Oregano</td>
<td></td>
<td></td>
<td></td>
<td>• Cumin</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Crushed red pepper</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Thai chili pepper</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Cayenne</td>
<td></td>
</tr>
</tbody>
</table>

**SAMPLE SCOREBOARD**

<table>
<thead>
<tr>
<th>SAUCE</th>
<th>HAS GARLIC</th>
<th>HAS THE MOST SPICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chermoula</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Green Curry Paste</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sofrito</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chimichurri</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pesto</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**ACTION STEPS**

1. **Sharing Favorite Sauces:** Divide students into five groups. They will work in these groups for the entire lesson. Begin by asking students to describe (in small groups) their favorite sauce. Provide some examples, such as soy sauce, ketchup, hot sauce, etc. Say, Be sure to tell your group why this sauce is your favorite, any ingredients you know, and (if you know) what country it comes from. After everyone in your group has shared, look for common themes, and have someone prepare to share with the whole class. After a couple minutes of small group discussion, ask a volunteer from each group to share the commonalities they noticed. You might have a student take notes on the board or chart paper. Say something like, Sauces are a way to add a contrasting flavor to a dish. People like ketchup with fries because it adds something sweet to something salty. Today we’re going to be looking at different sauces from around the world that use green herbs as their foundation. (5 min.)

2. **Studying Ingredients:** Explain that you’re going to give a green sauce recipe to each group to study. Say, You’re all going to be ingredient investigators, and we’re going to get to the bottom of what makes these recipes similar and what makes them different. Each person in the group will be on the hunt for a different type of ingredient and will mark up the recipe based on their role. Go over each role, having students offer examples of each category. Provide each team with recipes for different green sauces, Ingredient Investigator Role Cards, and highlighters or colored pencils. (10 min.)

3. **Ingredients Around the Room:** Tell students that in this next activity they’re going to represent their recipe. Explain that one side of the room will be “yes,” and one side will be “no.” You’ll have a representative from each group stand in the middle of the room, and you’ll ask whether their recipe contains a particular ingredient, and they’ll have to move to the yes or no side. If they’re unsure, they can stay in the middle and have a teammate help them. Play a few rounds, switching out the representatives for each team. Ask questions such as, Does your recipe have cilantro? Does your recipe have garlic? Does your recipe contain a hot spice? Does your recipe contain a fat? Have a student keep...
a scoreboard for the class on chart paper or on the board so that you can refer to it during the following discussion. **(10 min.)**

**4. Discussing Observations:** Ask students for their observations. **What do the recipes seem to have in common? What else do you notice?** Explain, *Herbs pack a powerful punch, so they’re a perfect ingredient to flavor other milder foods, but you wouldn’t necessarily eat herbs just on their own, so we use fats and acids and spices to balance the flavors. It seems around the world, people understand that eating green foods, rich in chlorophyll and vitamins and minerals your body needs, is good for you.* Share with students what the different recipes have traditionally been eaten with. For example, chimichurri is meant to complement steak in Argentina, and chermoula is often served with grilled seafood in Morocco. Explain that one sauce might be saltier, creamier, or spicier depending on which food it is meant to accompany. **(5 min.)**

**5. Hand–Washing Break (5 min.)**

**6. Passing the Molcajete:** Explain that all these sauces could be prepared the same way—by mashing the raw ingredients into a sauce or paste using a mortar and pestle, or *molcajete* as it’s called in Mexican Spanish. Show students your tool, and demonstrate how to use it. Pass the empty molcajete around, explaining, *In fact, the word “pesto” comes from the Italian verb pestare meaning to pound or crush. Garlic is a potent plant part we call an aromatic. When we crush these aromatic ingredients, like garlic, we are breaking down the plant’s cells walls, and they release their strong aroma and flavor.* **(5 min)**

**7a. Creating Recipe Cards:** Pass out recipe cards to students. Have them work with their groups to create their own green sauce recipe, incorporating different elements from the recipes they studied.

**7b. Making Sauce Together:** While students are creating their own recipes, call up one group at a time to help make the sauce. For example, one group can peel and smash garlic with coarse salt. Another couple of groups can pick herbs and incorporate them into the sauce. The next group can incorporate spices, and the final group can slowly drizzle in the olive oil. **(15 min.)**

**8. Tasting:** Divide the sauce into smaller dipping bowls for each group of four to six students, and have a student pass out a couple crackers or piece of bread to each student. Encourage students to discuss the balance of flavors they taste in the sauce in their groups. If groups came up with new ideas for green sauces, have them share with the class. **(5 min.)**

**REFLECTION**

Have students discuss the following questions in small groups, then share with the class: **(5 min.)**

**Social and emotional learning**
- What successes did you have working in your group?
- What challenges arose? How did you try to overcome them?

**Check for understanding**
- Why do you think the ingredients in your group’s recipe would be used in that particular part of the world?
- How can you incorporate one of these sauces into something you eat at home?
• How would you describe the flavors in the sauce we prepared?
• What techniques did you find best for working with the mortar and pestle?

ADAPTATIONS

Alternative Approach: If you have the resources, you might have each group make a different recipe, so students can taste the differences between the recipes.

Garden Setting: Make a green sauce based solely on what you can harvest in the school garden in the fall.

At Home: Have students bring home their customized recipe to make with their caregivers.

Research Extension: Have groups each research their recipe’s country of origin, studying the climate and culture to better understand why certain ingredients might be used in that region. This connects well with the fourth grade lesson Mealtime Traditions Around the World.

ACADEMIC CONNECTIONS

English Language Arts Common Core State Standards

CCSS.ELA-LITERACY.SL.5.1
Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others’ ideas and expressing their own clearly.
Ingredient Investigator Role Cards

Cut out the following to give to each student in a group:

**SPICE SLEUTH**
Highlight in red any spices. These include basic spices like salt and pepper, to bolder ones like cayenne!

**HERB-IVORE**
Highlight in green any herbs—this is what makes it a green sauce! Hint: These are probably leaves.

**ALLIUM ALLY**
Highlight in yellow any ingredients in the allium family. These include garlic, shallots, onions, leeks, and scallions.

**FAT FINDER**
Highlight in blue any ingredients that add fat to the sauce. These include oils, nuts, and cheeses.

**SOUR SEEKER**
Highlight in purple any acid ingredients that add a sour or acidic flavor. These include vinegars and citrus fruits.
Recipe Cards

Green Sauces Around the World

Note: These recipes provide students insight into more unique ingredients used in different cultures, but these ingredients may be difficult to access. Adapt and substitute where needed.

**Chermoula - North African**

Yield: 1 cup

1 cup packed cilantro leaves
1/2 cup packed parsley leaves
1/2 cup olive oil
1/4 cup preserved lemon juice, or 1/3 cup of regular lemon juice
4 medium cloves garlic, peeled
1 tablespoon paprika
2 teaspoons ground cumin
1/2 teaspoon cayenne
1/2 teaspoon Kosher salt, to taste
1/8 teaspoon crushed saffron (or substitute turmeric)

Blend ingredients in a blender or food processor until a smooth consistency.

*If substituting with turmeric, the sauce may have a more orange color.

**Sofrito - Caribbean**

Yield: 2 cups

1/2 bunch cilantro leaves (about 1 cup)
1/2 medium green pepper, seeds removed
1/2 small tomato, diced
1/2 medium sweet onion, peeled
1/4 red sweet pepper, seeds removed
3-4 garlic cloves, peeled

Blend ingredients in a blender or food processor until a smooth consistency.

*If substituting with turmeric, the sauce may have a more orange color.

**Pesto - Italian**

Yield: 1 1/4 cup

3-4 medium garlic cloves
1/2 teaspoon coarse sea salt, more to taste
3 ounces basil leaves (from about a 4-ounce bunch)
2 tablespoons (30g) pine nuts (or other nut such as walnuts)
5 tablespoons (2 ounces) grated Parmigiano-Reggiano
1/2 cup plus 2 tablespoons extra-virgin olive oil
1 tablespoon lemon juice (optional)

Blend ingredients in a blender or food processor until a smooth consistency.
Recipe Cards

Green Sauces Around the World

Note: These recipes provide students insight into more unique ingredients used in different cultures, but these ingredients may be difficult to access. Adapt and substitute where needed.

**Green Curry Paste - Thai**
Yield: 1 cup

- ½ cup sliced shallots
- ¼ cup garlic
- 2–3 green Thai chili peppers or 2–3 jalapeños (or other spicy pepper)
- 3–4 tablespoons sliced lemongrass
- 1 ½ tablespoons fresh galangal (or fresh ginger)
- 1 tablespoon salt
- 1 tablespoon sliced cilantro roots (or handful of cilantro)
- 1 tablespoon ground coriander
- ½ tablespoon cumin
- 1 kaffir lime, zested (or regular lime)
- ½ teaspoon peppercorns
- ¼ cup chili leaf (optional)

Blend ingredients in a blender or food processor until a smooth consistency.

Combine 1 tablespoon of paste with 1 cup coconut milk in a saucepan on medium heat until simmering and warmed through. Serve on rice or noodles.

**Chimichurri - Argentinean**
Yield: 1 ½ cups

- ¾ cup chopped parsley
- 6 tablespoons red wine vinegar
- 8 large garlic cloves minced
- ¼ cup oregano leaves
- 2–4 teaspoons crushed red pepper, to taste
- 1 teaspoon kosher salt, to taste
- ¼ teaspoon freshly ground pepper, to taste
- 1 cup extra-virgin olive oil

Blend ingredients in a blender or food processor until a smooth consistency.

Combine 1 tablespoon of paste with 1 cup coconut milk in a saucepan on medium heat until simmering and warmed through. Serve on rice or noodles.