Choose-Your-Own-Flavor Popcorn

THEME: PREPARING HEALTHY FOOD

ESSENTIAL QUESTION
How can we balance flavors in a dish?

LEARNING OBJECTIVES
✓ Students will be able to identify the flavor profile of various herbs and spices.
✓ Students will be able to blend flavors to create a custom popcorn seasoning.

CONCEPTS
collaboration  flavor profiles  ingredients

MATERIALS
- Popped popcorn (see Popcorn recipe below)
- Olive oil (for drizzling)

A tray with the following for each group of 4–6 students:
- 1 large bowl for popcorn
- 1 small bowl for each student
- Large spoon or tongs for stirring
- Small paper tasting cups of individual herbs or spices, representing a sample of each flavor profile in the 5 Flavor Profiles table below, for example:
  - Bitter: finely chopped rosemary, grapefruit zest
  - Sweet: honey or brown sugar (choose one, and provide only a small amount in one tasting cup)
  - Spicy: chili powder, cinnamon
  - Sour: lime wedges
  - Salty: sea salt
- 1 spoon for each tasting cup
- Scratch paper and pencils
- Flavor Profiles Poster (p. 438)

PREPARATION
› Pop popcorn. Typically ½ cup of kernels produces about 16 cups of popcorn, so adjust the amount depending on your desired serving size.
› Just before class, drizzle the popcorn with olive oil, and distribute it into one bowl for each group of 4–6 students. Prepare trays for groups of students.

LESSON DESCRIPTION
In this lesson, students explore the five flavor profiles, identifying and sorting ingredients in teams and working collaboratively to create a custom popcorn seasoning.
**Popcorn**

**Yield:** About 30 servings, ½ cup

- 2 tablespoons high-heat oil such as canola or avocado
- ½ cup popcorn kernels
- 1–2 teaspoons salt, to taste
- 2 tablespoons olive oil for drizzling (optional)

- Heat oil in a large stockpot over medium high heat, adding 1–2 kernels right away.
- Once the kernels pop, add 1 cup of kernels or enough to evenly coat the bottom of the pot. Immediately cover the pot with a lid, gently shaking over the burner.
- Once the sound of kernels popping slows, remove the pot from the heat. As soon as popping stops, transfer into a bowl and add salt and seasonings of choice.

**Example Flavor Combinations**
- Salt, lime juice, and chili powder
- Cocoa powder, honey, and chili powder
- Salt, rosemary, and nutritional yeast

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**5 FLAVOR PROFILES**

<table>
<thead>
<tr>
<th>Salty/Umami</th>
<th>Bitter</th>
<th>Spicy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dried seaweed</td>
<td>Cocoa powder</td>
<td>Chili powder</td>
</tr>
<tr>
<td>Nutritional yeast</td>
<td>Grapefruit zest</td>
<td>Cinnamon</td>
</tr>
<tr>
<td>Parmesan cheese</td>
<td>Peppermint</td>
<td>Cumin</td>
</tr>
<tr>
<td>Sea salt</td>
<td>Rosemary</td>
<td>Curry powder</td>
</tr>
<tr>
<td>Soy sauce</td>
<td>Thyme</td>
<td>Hot sauce</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sweet</th>
<th>Sour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown sugar</td>
<td>Lemon or lime juice</td>
</tr>
<tr>
<td>Honey</td>
<td></td>
</tr>
<tr>
<td>Maple syrup</td>
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</tbody>
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**ACTION STEPS**

1. **Engage:** Tell students that today they’ll be working with the five flavor profiles in cooking to create their own popcorn seasoning. Have students turn and talk to see if they can name all five. Share as a class. *(5 min.)*

2. **Hand-Washing Break (5 min.)*

3. **Exploring Flavors:** Explain that you’ve prepared different herbs, spices, and ingredients that fit the five different flavor profiles, and in teams they’ll need to figure out which belongs in each profile group. Explain, *I’ll give each team five scraps of paper. Your task is to sort the ingredients into five distinct groups. On each paper, write the flavor, such as bitter, and then all the ingredients you can identify that fall under bitter.* Demonstrate how to use a spoon to put a small pinch of one item into your hand without touching or licking the end of the spoon. Then smell, observe, and taste the ingredient to figure out what it is and what flavor profile it matches. Remind students that the spoons are to share, so they shouldn’t touch the serving end. Also remind them to save some of each flavoring for their popcorn. Pass out trays and circulate through the room as students work in groups, asking guiding questions such as, *Does this herb smell familiar to you? In what dish have you smelled or tasted this spice before? (10 min.)*

4. **Discussing Flavors:** Go over each flavor profile as a class, having groups take turns sharing the identified herbs and spices. As you review ingredients, share information with students, such as how bitter herbs like peppermint can help your stomach digest foods. After you’ve gone over each flavor, discuss combining them. Ask, for example, *How would you balance sweetness in*
a dish? Discuss different popular flavor combinations students might be familiar with, such as sweet and sour sauce from Chinese restaurants or chili and lime on fruit in Mexican cuisine. *(10 min.)*

5. Creating Custom Popcorn Seasoning: Explain that student teams will now create their own custom seasoning for their team bowl of popcorn. Model with your own bowl (e.g., sprinkling salt, squeezing lime juice, and distributing a pinch of chili powder over your bowl). Stir with a spoon and sample, demonstrating how you adjust the flavor for your taste. Tell students they’ll have five minutes to work with their team to create their seasoning. Pass out bowls of popcorn to groups of students, and have them prepare their own custom blend. *(10 min.)*

6. Tasting: Have students wait until you tell them to eat their popcorn. Encourage students to share some of their popcorn with other groups to taste a variety of combinations. *(10 min.)*

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

Social and emotional learning
- How did your group decide what flavors to use on your popcorn?
- What challenges did you experience? How did you work to overcome them?

Check for understanding
- What did you use for your seasoning? What were your favorite flavor combinations? How do some of your favorite dishes combine the flavor profiles?
- How would you teach someone else to make a flavorful popcorn seasoning?

ADAPTATIONS
Garden Setting: Split students into teams, and have them hunt for herbs and other items in the garden, finding as many of the flavor profiles as they can. Remind them only to taste with adult permission to ensure that they don’t pick and eat anything poisonous.

ACADEMIC CONNECTIONS
English Language Arts Common Core State Standards
CCSS.ELA-LITERACY.L.4.5.C
Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).
5 FLAVOR PROFILES

SALTY/ UMAMI
- Sea salt
- Soy sauce
- Dried seaweed
- Nutritional yeast
- Parmesan cheese

BITTER
- Rosemary
- Thyme
- Peppermint
- Grapefruit zest
- Cocoa powder

SPICY
- Chili powder
- Hot sauce
- Cinnamon
- Cumin
- Curry powder

SWEET
- Honey
- Maple syrup
- Brown sugar

SOUR
- Lemon or lime juice
- Vinegar