Salad Dressing Challenge

THEME: PREPARING HEALTHY FOOD

ESSENTIAL QUESTION

How can we balance flavors in a dish?

LEARNING OBJECTIVES

✓ Students will be able to collaborate to prepare a salad dressing.
✓ Students will be able to develop their own salad dressing recipe.

CONCEPTS

adjusting a recipe     balance      collaboration
formula     ratio of ingredients

LESSON DESCRIPTION

After learning the basic formula for a dressing, students will collaborate in groups to develop a custom salad dressing, and they will vote on a class favorite.

MATERIALS

- Salad Dressing Formula Poster (p. 472)
- A collection of a few dressing ingredients from the chart below; limit to just a few items, such as olive oil, 3 kinds of vinegars, salt, honey, mustard, and 2 spices or herbs
- 5–6 small bunches of greens (kale, spinach, lettuce, or whatever is available)
- Small pitcher of water (to thin dressing for students who use tahini or avocado)
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A set of the following for each group of 4–6 students:

- Salad Dressing Challenge Group Instructions (p. 473)
- Zip lock bags for kale or large mixing bowls for lettuce
- Measuring spoons
- Small bowls
- Kitchen tongs
- 1 small jar with screw-top lid (½ pint)

For each student:

- Plate and fork
- Salad Dressing Recipe Cards (p. 474)

PREPARATION

» Set up a station of ingredients at the front of the room where students will shop. Ideally, you’ll have several options from each column in the chart, so groups will have distinct
dressings. Choose what makes sense based on your comfort level, what’s in season, and what you already have on hand.

- Prepare a large bowl or zip lock bag of greens for each group as well as a small bowl for tasting.
- Pour 2 tablespoons of olive oil or other fat into a mason jar for each group.
- Display a chart of the list of ingredients you have on hand (on chart paper or on the board)
- Photocopy and cut blank Salad Dressing Recipe Cards for each student.
- Display the following Dressing Formula: 
  2 Fat + 1 Sour + Small Pinch of Salty and Small amount of Sweet = Dressing!

### POSSIBLE INGREDIENTS

<table>
<thead>
<tr>
<th>FAT</th>
<th>SOUR</th>
<th>SALTY</th>
<th>SWEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avocado</td>
<td>Apple cider vinegar</td>
<td>Fish sauce</td>
<td>Honey</td>
</tr>
<tr>
<td>Olive oil</td>
<td>Balsamic vinegar</td>
<td>Kosher salt</td>
<td>Raisins</td>
</tr>
<tr>
<td>Sesame oil</td>
<td>Lemon/lime</td>
<td>Sea salt</td>
<td>Other dried fruit</td>
</tr>
<tr>
<td>Tahini</td>
<td>Mustard</td>
<td>Soy sauce</td>
<td>Apple slices</td>
</tr>
<tr>
<td>Yogurt</td>
<td>Orange</td>
<td></td>
<td>Other fresh fruit</td>
</tr>
<tr>
<td></td>
<td>Rice vinegar</td>
<td></td>
<td>Sugar</td>
</tr>
</tbody>
</table>

### ACTION STEPS

1. **Engage:** Have ingredients on display, and ask students to share which ingredients they know and like. Lead a discussion about students’ favorites. Have students figure out the four different categories of ingredients. Ask, *What do each of these groups of ingredients have in common?* Have students discuss and share ideas as a class. Explain that any good dressing or sauce has a balance of these things: richness, sourness, saltiness, and perhaps some sweetness. The key to making a good dressing is balancing these flavors based on what you like and tasting as you go. Direct students’ attention to the Dressing Formula: 2 Fat + 1 Sour + Small Pinch of Salty and Small amount of Sweet = Dressing! Say, *If you had eight tablespoons of a fat, how many tablespoons of a sour ingredient should you add? (10 min.)*

### Example 1

- 2 tablespoons tahini
- 1 tablespoon water
- 1 tablespoon rice vinegar
- 1 teaspoon soy sauce
- 1 teaspoon honey

### Example 2

- 2 tablespoons olive oil
- 1 tablespoon lemon juice
- ½ teaspoon salt
- ¼ cup dried cranberries

- Combine dressing ingredients in a mason jar. Seal and shake until incorporated. Taste and adjust seasoning. If using tahini or avocado, a tablespoon or two of water or oil may be needed to achieve a dressing consistency.
- Tear one bunch of kale into small bite-sized pieces. Put in a zip lock bag, and pour in a couple tablespoons of your custom dressing. Seal the bag, and massage the dressing into the kale through the bag. Taste and add more dressing or salt, if needed.

### Massaged Kale Salad

**Yield:** 6 servings, ½ cup

- 2 tablespoons fat
- 1 tablespoon sour
- ½–1 teaspoon salty
- 1 teaspoon sweet (or ¼ cup dried fruit)
- 1 bunch kale
2. **Explain the Activity:** Say, *In groups you’ll be coming up with your own dressing recipe. You’ll be given a fat to start with (eight tablespoons already in your mason jar); and then you’ll have to come to a consensus about what your sour, salt, and sweet will be. Be open-minded and open to compromise. Once you’ve each created your own salad dressing, we’ll have a chance to try each other’s and vote on our favorite!* Remind students that a little goes a long way; and especially when it comes to adding salt or soy sauce, for example, they’ll want to add in pinches or dashes at a time. Demonstrate and show what a pinch or a dash would be. Discuss ways of tweaking a dressing (e.g., ask, *If my dressing tastes too sour because I added too much vinegar, what can I add?*) Discuss adding more of the fat or sweet ingredients. *(5 min.)*

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

4. **Negotiating a Dressing Recipe:** Break students into groups of no more than five, and give them their group jar, a small bowl of leaves for tasting, and the Salad Dressing Challenge Group Instructions. You may want to assign a group leader who can give roles to each group member, such as recipe recorder, timekeeper, spokesperson, taste tester, etc. Have students negotiate and decide on their formula. Once each group has come to a consensus, have a group representative come to shop for ingredients with you at the ingredient station. *(10 min.)*

5. **Making Dressing:** Back at their tables, have groups add ingredients, shake their jars, and take a small leaf and dip it into the dressing. Remind them not to put a partially eaten leaf back into the jar. Ask how they can work together to improve the recipe. Say, *Talk with your group about what you can taste the most of and what you might need more of. Give them time to adjust their recipes. (5 min.)*

6. **Dressing Salad:** Once each group is satisfied with their dressing, pass out bowls of greens. If you’re making a massaged kale salad, pass out zip lock bags of kale for students to pour dressing directly into and then massage the leaves through the bag. *(10 min.)*

7. **Tasting and Voting:** Have groups bring up bowls of tossed salad to the front of the room. Then have students use tongs to take just a taste of each salad on their plates, buffet-style. Alternatively, have one representative from each group circulate through the room and serve students a taste. Taste together and encourage students to use descriptive words to describe the flavors. You could also invite them to share a “pro” (something they like about the dressing) and a “grow” (a suggestion for improvement). Students might enjoy having their classroom teacher or another staff member decide on the best dressing in addition to a class vote. *(10 min.)*

8. **Recipe:** Have each student write their ideal dressing recipe to take home. *(5 min.)*
REFLECTION
Have students discuss the following questions in small groups, then share with the class: (5 min.)

Social and emotional learning
• How did it feel to negotiate in your groups?
• How did your groups determine what would go in your dressing?
• How did your ability to collaborate affect the taste of your dressing?

Check for understanding
• Which dressing was your favorite?
• What ingredients surprised you?
• How did tasting other groups’ dressings change your mind about your own dressing?
• How could you make this dressing at home?

ADAPTATIONS
Garden Setting: Have students harvest their own greens and fresh herbs to add to their dressing.

ACADEMIC CONNECTIONS
English Language Arts Common Core State Standards
CCSS.ELA-LITERACY.SL.4.1
Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.
SALAD DRESSING FORMULA

2 tablespoons Fat + 1 tablespoon Sour
+ Small Pinch of Salty + Small amount of Sweet
= DRESSING!
SALAD DRESSING CHALLENGE GROUP INSTRUCTIONS

1. Decide on your dressing flavor profile as a TEAM!

2. Add ingredients to your jar. Put the lid on and shake, shake, shake!

3. Take a leaf and dip it into the dressing to taste test.

4. Decide what your dressing still needs.

5. Pour some of your dressing over the greens in your zip lock bag. Seal the bag shut.

6. Massage the greens through the bag. Add more dressing only if needed.