



**COURSE INTRODUCTION:
GETTING GROUNDED**

L.2

WHAT WE EAT

Note to Teachers

This lesson takes students back to the basics: to help them understand what food is and the plants and animals that comprise it. Students may have had little opportunity to consider the natural origins of food; the products we buy in the grocery store often bear little resemblance to the plants and animals that contributed to them. Even well-informed adults are often amazed to learn about common foods' origins, such as the fact that flour comes from ground grain.

In this discussion, students will learn about components of plants, the animals from which our meat comes, and the origin of basic pantry staples. Students will understand that even highly processed foods include ingredients produced on a farm. This exercise reminds students that we often ignore parts of plants that are edible and nutritious.

Students will also use a variety of seasonal ingredients and kitchen staples to create a salad guided by their taste buds and curiosity rather than by a recipe. After they create the salad, they will write a recipe along with notes for how they might make adjustments the next time they make it.

Goals *In this lesson, students will*

- begin to develop the habit of asking questions about the foods they eat.
- connect foods back to their natural sources.
- gain confidence with ingredients and express creativity in the kitchen, learning the basics of a vinaigrette and discovering how the shape and size of a vegetable affects the enjoyment of a dish.
- understand the format and function of a recipe.



WHAT WE EAT

Please use this margin to notate how to best adapt this curriculum to your students.

Objectives

- Through a video and PowerPoint Presentation students are reminded about the parts of a plant.
- Pictures and descriptions depict familiar foods and what part of the plant they are from. Images also depict other food items, including meat, dairy and processed foods, and illustrate their origins. These images remind students that much of our food originates on a farm.
- Students dissect plants to absorb the idea that multiple parts of plants can be edible. This helps them to understand that all plants have essentially the same parts and that farmers harvest for the edible parts.
- With the No-Recipe salad, students will express their preferences and creativity.
- By tasting each other's completed salads, students learn the variety that can occur with the same ingredients and how different decisions in quantity and preparation affect the overall enjoyment of a dish.
- As students document the process of preparing their salad, they discover the importance of both precise measurement and estimations.

Materials

- "What We Eat" video
- PowerPoint presentation and script
- 6 large trays, butcher paper, or similar rectangular surface
- 6 cutting boards
- 6 knives
- Plant part labels: stem, leaf, root, flower, seed, fruit
- Variety of vegetables representing a range of plant parts.
Some good choices:
 - Carrots with tops
 - Beets with tops
 - Ear of corn
 - Green beans or snap peas
 - Apple
 - Avocado
 - Asparagus
 - Kale or Swiss chard
 - Chives
 - Mint
 - Sunflower seed in shell (shell is the fruit, seed is inside)
 - Peanuts in shell (shell is the fruit, peanuts are the seeds)
 - Cinnamon stick
 - Broccoli
 - Artichoke
 - Pantry and other supplies for the **NO RECIPE SALAD**
- Copies of the **LAB: NO-RECIPE SALAD**

Instructions

1. Setting a Foundation

- a. Begin the class by showing the video. There is no need to preface the video except to ask students to consider what story the filmmakers wish to tell.



WHAT WE EAT

Note: The video seeks to spark a conversation about where our food comes from and to identify some of the benefits of having this conversation.

- b. Encourage students to share that “story” as they saw and heard it.
- c. Extend that initial exposure with the PowerPoint Presentation. The script and images will connect specific foods to their origins, focusing principally but not entirely on linking vegetables and fruits back to the plant parts they represent.
- d. Encourage students to respond to what they have seen. Did anything surprise them? Did they learn anything new? Why might it be important for them to be able to identify where their food comes from?

2. Plant Dissection

- a. Ask students to wash their hands carefully. Hygiene is a critical part of kitchen life, so feel free to demonstrate. Encourage students with long hair to pull it back (and to do so before each lab).
- b. In the meantime, label six bowls or trays, each with the name of a plant part. Put them at the front of the room. Place vegetables on a central table and create six stations with a cutting board and a knife.
- c. Divide students into six groups.
- d. Have students work in small groups to select a vegetable or fruit and dissect it so that the parts are in the correct bowl. For example, cut an apple in half and remove the seeds. Place the seeds on the tray labeled “seeds” and the rest on the tray labeled “fruit.”

3. Discussion and Adjustments

- a. Talk about which parts of the plants are cultivated and/or edible. For example, carrots are cultivated for the root, but the stems and leaves are also edible. Apples are cultivated for the fruit, but the seeds are not edible.
- b. As a group, make adjustments or additional dissections to break the vegetables down further. Save edible parts of vegetables and fruits for the **LAB: NO-RECIPE SALAD**.
- c. Introduce a compost bin and the idea that even though there may be parts of plants we cannot eat, we want to preserve the nutrients they contain in the form of compost.

4. No Recipe Salad

- a. Ask the group what ingredients they think of when asked to prepare a salad. Ask for examples of the best salads they ever had and what made them so wonderful.
- b. Explore with the group both the premise of a salad (vegetables + dressing) and a salad’s various components:
 - i. Vegetables: raw, roasted, steamed
 - ii. Protein: cooked chicken, steak, bacon, seafood, eggs, beans, nuts, seeds
 - iii. Dairy: cheese, dressing



WHAT WE EAT

- iv. Grains: wheat berries, pasta, rice
- v. Any combination of Vegetable + Protein + Dairy + Grains + Dressing
- c. Discuss the basics of making a vinaigrette: 1 part acid + 2 parts oil, plus additional ingredients that can be added. Talk about how the various combinations might work well together.
 - i. Acids: lemon juice, lime juice, vinegar, orange juice
 - ii. Oils: Olive, grape seed, sesame, nut oils
 - iii. Seasoning: Salt, pepper, spices
 - iv. Binder/emulsifier: mustard, mayonnaise, egg yolk, honey, maple syrup
- d. Demonstrate how to whisk the acid, binder, and seasoning together first and then slowly add the oil while whisking to emulsify.
- e. Talk about the importance of cuts and review options such as a dice, disk, grate – and how the consistency could affect the dish.
- f. Have students prepare the salads and complete the recipe template form.
- g. Taste the salads, encouraging students to use their food vocabulary to describe what they taste.

5. Optional Extension and Assessment

- a. Have the students remake their salad after considering the adjustments. Have them edit the recipe template.
- b. Have groups swap recipes and prepare another group's salad per the recipe.
- c. Have the group evaluate the experience by answering the following questions:
 - a. What did you notice as you tried to re-make your salad following your recipe?
 - i. Were there errors or omissions in the amounts or in the description of steps?
 - b. What did you notice as you tried to follow another group's recipe?
 - i. Where was the recipe particularly clear and effectively communicated?
 - ii. Were there errors or omissions in the amounts or in the description of steps?
 - iii. Would you change anything about the recipe to better suit your taste?



WHAT WE EAT

Equipment List

PER GROUP

- Cutting boards
- Knife
- Peeler
- Small taster spoon per person plus a mother spoon
- Tasting forks
- Small plate for tasting salads
- Presentation plate
- Whisk
- Mixing spoon
- Large bowl for salad
- Small bowl for dressing
- Wet measuring cup
- Measuring spoons
- Dry 1 cup measure
- Dry ¼ cup measure

COMMUNAL

- Compost bowl or bowls
- Juicer
- Grater

LABELS FOR INGREDIENTS

Mise en Place

BEFORE THE CLASS ARRIVES

1. Wash vegetables and herbs.
2. Set up a table for all of the ingredients.
3. Place ingredients on the table by category with labels.
4. Set up a station for each group.
5. Print recipe template.

Shopping List

- Variety of seasonal vegetables (see **TEACHER RESOURCE: SEASONAL VEGETABLES**).
- Amounts will depend on number of groups and how great a variety you choose. It should be enough to make a personal-sized salad for each group.
- Here are some options to choose from:

GREENS

- Spinach
- Kale
- Lettuces

ROOTS AND RHIZOMES

- Beets (raw or roasted)
- Carrots
- Radishes
- Ginger
- Bulbs
- Shallots
- Fennel
- Garlic
- Red Onion

FRUITS AND VEGETABLES

- Roasted squash
- Apples
- Oranges
- Grapefruits
- Dried cranberries
- Pears

HERBS

- Dill
- Chive
- Basil
- Mint
- Cilantro

ACIDS

- Lemon
- Lime
- Variety of vinegar (balsamic, cider, red, white, rice)
- Orange
- Grapefruit

OILS

- Grape seed
- Olive
- Sesame
- Nut oils

GRAINS

- Cooked orzo
- Cooked wheat berries

- Cooked quinoa
- Cooked rice
- Cooked pumpkin
- Cooked meat

SEASONINGS

- Salt
- Pepper
- Red pepper
- Cumin
- Sugar
- Dried herbs—thyme, oregano, basil

EMULSIFIERS

- Mustard (Dijon, whole grain)
- Mayonnaise
- Honey
- Maple syrup

PROTEINS

- Hard-boiled eggs
- Nuts (almonds, walnuts, peanuts)
- Seeds (sunflower,

DAIRY

- Buttermilk
- Cheese (mozzarella, parmesan, cheddar)

Directions

1. Walk students through the ingredients and suggestions for how to use.
2. Remind the group about the basic ratio for vinaigrette. Discuss the quantities that they will want at the end of the lesson – e.g., about ½ cup of dressing – and what that means for their starting ratio.
3. Have the students spend 5 – 10 minutes with their group discussing what they might use in their salad and in their dressing.
4. Have students prepare their salad and complete the **RECIPE TEMPLATE**.
5. Have students present their salad to the class. Allow all of the students to taste each other's salads. Discuss the results – reminder to use the vocabulary discussed in the **FOOD VOCABULARY** lesson, avoiding subjective (especially negative) language.



WHAT WE EAT

INSTRUCTIONS: Cut along dotted lines and place with each category.

Vegetables and Fruits

Consider preparation – e.g., dicing, batonnet, grating. Consider if you want to peel first. Make sure to remove any parts that aren't edible. Think about whether you can add to the dressing or to the salad – or both. Consider size and uniformity.

Herbs

Herbs can be added to the salad or to the dressing. Consider their texture as you decide whether to add whole or chopped.

Spices and Seasonings

Think carefully about quantity and how they will add to the overall flavor of the dish.

Acids

More than one acid can be combined to make vinaigrette.

Oils

Decide if you would like a flavorful oil that adds to the complexity of the dressing or a neutral oil that will highlight the flavor of the acids and seasonings you use.

Emulsifiers

It is not necessary to use a binder. If you choose not to, remember to re-whisk the dressing before adding to the salad.



WHAT WE EAT



When creating your recipe keep this in mind:

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RECIPE NAME

The recipe name should tell the eater what the dish is and the basic ingredients.

INGREDIENTS

Include mise en place that you would like to happen before the directions. List ingredients in the order they will be used and organize by their use, e.g., for dressing vs. for the salad. Be sure to include measurements.

DIRECTIONS

Be as descriptive as possible.

RECIPE NOTES

What would you like to do differently if you were to repeat this recipe? What did you enjoy most about this recipe?





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GETTING GROUNDED**

L.2

Extension

**LAB
EXPLORATION
OF APPEARANCE,
TASTE, AND
TEXTURE**

Note to Teachers

In Lesson 2, students will have considered taste and devised an initial list of taste words. This extension lab is devised to help further the process of defining a language for taste and texture – a language that will help them to express why they like, dislike, or feel ambivalent toward foods they taste over the course of the semester.

In our classes, two of the rules that reign in lab are (1) tasting everything and (2) using detailed descriptive language to express a response to a food. We understand that not all students will enjoy all of the foods they eat (and that many students may express a strong dislike of vegetables), but we ask that students move beyond their preconceived notions and to withhold judgment. We have noticed that students who express a strong dislike can discourage their socially sensitive peers from expressing their enjoyment, or from even trying new foods. Using detailed descriptive language facilitates a more objective and neutral discussion and makes room for students who both like and dislike the foods we make.

This lesson also gives students an opportunity to review basic knife skills and to learn specific knife cuts. Consistent cuts will ensure that food cooks evenly.

Instructions

1. Select three vegetables.
 - Use seasonal vegetables. For example, in September, we are preparing to use kale, leeks, and peppers. In spring, you might use another cold-tolerant vegetable like spinach and storage vegetables such as carrots and beets.
 - Consider using at least one vegetable that will be unfamiliar to students and at least one that will be familiar.



LAB EXPLORATION OF APPEARANCE, TASTE, AND TEXTURE

Please use the provided margin to notate how to best adapt this curriculum to your students.

2. Students will prepare these vegetables three ways. For example:

RAW	PICKLED/DRESSED	COOKED
Torn kale leaves	Torn kale leaves, massaged, and dressed with lemon and olive oil	Sautéed in oil
Thinly sliced, pencil-sized leeks	Pencil leek quick pickle (made in advance)	Braised full-sized leeks
Cubed red and yellow sweet peppers	Instant pepper pickle	Roasted peppers in oil (made in advance)

3. This is a good lesson to introduce with a reminder about knife safety. Remind students that they need to help each other work on good and safe technique.
4. Now introduce knife cuts, using the accompanying handout. Assign different knife cuts to different groups. This is a great moment to practice consistency. You will probably find that a model cut in the corner of the cutting board keeps students on track!
5. Prepare the vegetables for serving.
6. Have students prepare the plates so that a taste of each vegetable is carefully arranged from raw to cooked.
7. Distribute the attached rubric.
8. Ask students to observe, smell, and taste each vegetable in each state silently. This is an individual activity, and it will be more productive and effective if students are working independently without speaking to each other. Since a strong dislike of vegetables is central to some students' identity, this directive may be difficult to achieve, but give it a try.

Very Important: Ask students to approach this exercise with a sense of curiosity. Exploring new tastes will open them to other new experiences. Ask students to explore each vegetable in each state, describing each aspect of each before moving on to the next state or vegetable.

Students should complete the rubric using language that describes what they see, smell and taste. The language should be descriptive, rather than judgmental. They may not like sour foods, for example, but "sour" is an effective descriptive term while "gross" is not. Ask students to seek the word that most closely describes the aspect of the food they are addressing, exercising their full vocabulary.

9. As you may not have time to share each description for each state, select at least one state for each vegetable. Ask students to share their descriptive terms, making a list on the board or elsewhere as you go. If students began a list of taste words in Lesson 2, encourage them to add the new terms they have used here to create a master list to which they can add all semester.
10. Close the class by asking for final observations and questions.



LAB EXPLORATION OF APPEARANCE, TASTE, AND TEXTURE



Use detailed language here to describe the characteristics of each vegetable in each state.

	APPEARANCE	TASTE	TEXTURE
RAW KALE			
MASSAGED AND DRESSED KALE			
SAUTÉED KALE			
RAW LEEK			
PICKLED LEEK			
BRAISED LEEK			
RAW SWEET PEPPER			
PICKLED SWEET PEPPER			
ROASTED SWEET PEPPER			



LAB EXPLORATION OF APPEARANCE, TASTE, AND TEXTURE

Medium Dice

1/2" x 1/2" x 1/2" cubes



Batonnet (bah-to-nay)

1/4" x 1/4" x 2" sticks



Julienne

1/8" x 1/8" x 2" sticks

*Also known as an Allumette (al-yoo-met)
cut when used with potatoes.*



Fine Julienne

1/16" x 1/16" x 2" sticks



Large Dice

3/4" x 3/4" x 3/4" cubes



Small Dice

1/4" x 1/4" x 1/4" cubes



Brunoise (broo-nwaz)

1/8" x 1/8" x 1/8" cubes



Fine Brunoise

1/16" x 1/16" x 1/16" cubes

