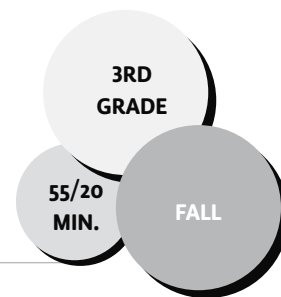


Quick, Pickle That!

THEME: PREPARING NOURISHING FOOD

55 min. (Day One)

20 min. (Day Two)



ESSENTIAL QUESTION

How can we preserve fresh fruits and vegetables?

LEARNING OBJECTIVE

✓ Students will be able to collaborate to make quick pickles.

CONCEPTS

collaboration food preservation pickling

ENGAGING THE CLASSROOM TEACHER

- Prior to the lesson, discuss with the teacher the best strategy for breaking up the class into groups of 4–6.
- Determine the best day to return for the pickle tasting, approximately one week after the activity (it should take about one week for the pickles to ferment). Be sure to eat the pickles within three weeks after making them.
- During Action Step 6, suggest that the teacher help groups who are struggling to agree on their flavors.
- During Action Step 7, suggest that the teacher circulate through the room to ensure teams are following directions.

LESSON DESCRIPTION

In this lesson, students explore the role of

preservation in preparing food. In teams, they make customized quick pickles.

MATERIALS

- Jar of store-bought sliced pickles
- Toothpicks
- 2–3 different ingredients from each column in the chart
- Pitcher of pickling brine (see recipe below)
- Liquid measuring cup
- Wide-mouth funnel
- Masking or painter's tape
- Permanent marker
- Materials for cleanup
- Blank Recipe Cards for each student (p. 331)

Tray with the following for each group of 4–6 students:

- Half-pint jar with lid
- Several cutting mats
- Several knives
- Wide-mouthed funnel
- Bowl of produce you're pickling—from the chart (you may opt to have different groups prepare different vegetables, or keep it simple with one type of vegetable and allow for variety through the use of herbs and spices.)
- Small bowl for gathering herbs and spices
- Container for compost.
- Descriptive Food Words Poster (p. 332; optional)

PREPARATION

- › Place sliced pickles on a plate, and skewer each with a toothpick.
- › Before class, use the Pickling Brine Ratio to make a brine for the class to use. Allow the brine to cool before handling it with students.
- › Wash the produce.

- › Prepare a small tray of samples of the herbs and spices students will have to choose from.
- › Set up a station at the front of the room with measuring spoons and the various herbs and spices available to students.
- › Photocopy and cut blank recipe cards for students.
- › Check with school staff, and locate a refrigerator where you can store your pickle jars until you meet with your group the following week for Day Two of the lesson (tasting).

QUICK REFRIGERATOR PICKLES

Yield: About 25 servings, $\frac{1}{4}$ cup

Pickling Brine Ratio*

2 cups vinegar
2 cups water
2 tablespoons salt

- Adjust the brine amounts assuming each half-pint jar will need approximately a $\frac{1}{2}$ cup of brine. Combine ingredients in a saucepan over high heat and bring to a boil.
- Stir the liquid so the salt dissolves, then remove from heat.
- Let cool and then store in an airtight container until ready for use.

Example of a Savory Pickle

1 cup carrots (about 1 $\frac{1}{2}$ medium carrots)
 $\frac{1}{2}$ tablespoon coriander seeds
1 garlic clove
 $\frac{1}{2}$ –1 cup rice vinegar brine, enough to submerge fruit/veg in jar (an extra $\frac{1}{4}$ cup)

Example of a Sweet Pickle

$\frac{3}{4}$ –1 cup strawberries
 $\frac{1}{2}$ tablespoon honey
 $\frac{1}{2}$ –1 cup apple cider vinegar brine, enough to submerge fruit/veg in jar

Note: You'll need approximately five cups of produce (one cup for each group). See the table below for ideas of possible pickle ingredients. Consider having two produce options, so half the groups can work on a different main ingredient.

- Prepare fruit and/or vegetables—enough to fit in one $\frac{1}{2}$ pint jar, approximately 1 cup.
- If making a sweet brine, stir honey or sweetener of choice into brine until it dissolves.
- Place half of herbs and seasoning at the bottom of the jar. Fill halfway with the vegetable, add the rest of herbs and seasoning, then add the rest of the vegetable. Pour the prepared brine over ingredients, leaving $\frac{1}{2}$ inch of headroom at the top.
- Wipe down jar rim, and screw on metal top. Refrigerate immediately.
- Remember to eat the pickles within three weeks after making them. Children who are at high risk for food-borne illnesses (those with compromised immune systems) should eat refrigerator pickles within the fresh food guide line time frame of three days.

POSSIBLE PICKLE INGREDIENTS

Produce	Vinegar (1-to-1 ratio with water)	Herbs and Seasoning
• Carrots	• Apple cider vinegar	• Basil
• Cucumbers	• Rice vinegar	• Coriander seeds
• Green beans	• White vinegar	• Dill flower heads and seeds
• Radishes		• Garlic cloves
• Rhubarb		• Honey
• Strawberries		• Mint
• Summer squash		• Paprika
• Sweet peppers		• Rosemary
• Turnips		
• Zucchini		

ACTION STEPS

1. Engage: Teach students the tongue twister, “Peter Piper picked a peck of pickled peppers.” Ask students whether they’ve ever eaten a pickle. Ask, *When you imagine a typical green pickle, do you know what plant that comes from?* Discuss cucumbers, but also explain that so many other fruits and vegetables can make delicious pickles, like Peter Piper’s pickled peppers. **(5 min.)**

2. Pickle Tasting: Give each student a pickle slice on a toothpick, and have him or her taste it. Ask students to describe how pickles taste and if they know what ingredients give pickles their taste. Explain, *For as long as humans have been eating food, they’ve found ways to preserve. Preserving means to make something last longer. For example, berries only grow for a few months in the summer, so people make jam as a way to enjoy the flavor all year long. Pickles are the same. We add vinegar or salt to foods as a way to make them last longer. Pickling foods first began as another way to preserve the summer harvest.* Introduce the vegetable(s) you’ll be using in class. **(5 min.)**

3. Explain the Activity: Tell students that today they’re going to make pickles in teams, and they’ll taste all the different teams’ pickles during the next class. Pass a sample of the various herbs and spices around the circle for students to smell, naming each one and having students repeat the name. Explain that in groups they’ll decide on their flavors, chop their vegetables, and add all the ingredients to their jar. Explain that you’ll then come around to help them fill their jar almost to the top with brine. Show them the brining liquid, explaining that it’s equal parts water and vinegar with some dissolved salt. **(5 min.)**

4. Hand-Washing Break: Remind students about the importance of cleanliness while cooking and preserving food. **(5 min.)**

5. Knife Skills Demonstration (5–10 min.)

6. Deciding on Flavors: Split the class into groups of 4–6, and have them discuss and determine which seasoning they’d like to add to their pickles. Consider the following structured way for students to self-select their groups: Designate the four corners of the room to different flavor profiles such as “sweet,” “spicy,” “garlicky,” and “herby,” so students who are interested in similar flavors can group together. **(5 min.)**

7. Making Pickles: Pass out trays with supplies to each group. Supervise students while they’re cutting vegetables. While teams are chopping, have one team member from each group come up and shop for the flavoring ingredients. Emphasize that they should take no more than 2 teaspoons of spices and no more than 1 tablespoon of fresh herbs. Once students have packed vegetables, herbs, and spices into their jar, move through the room, pouring the brine over the contents, leaving ¼ inch of room at the top of the jar. Have students seal the jars, and use a permanent marker to write their team name and the date on masking tape to label their jar. **(10 min.)**

8. Writing the Recipe: Have students clean up. Pass out recipe cards. Have them write a list of the ingredients they used. Next, as a class, review the directions for making quick pickles. Explain, *These are also called refrigerator pickles because they must be kept in the fridge, which is where I’ll keep them until I see you next!* **(10 min.)**

Follow-Up: Next class, have each group share what type of pickles they made. Then have a smorgasbord of pickles to try. Students can use toothpicks to test pickles from each jar. You may want to bring plain crackers as a palate cleanser between pickle tastings. Have students focus on describing the different flavors of the various pickles, rather than whether they liked them. Pass out or display the Descriptive Food Words Poster to give students vocabulary for what they taste. **(20 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 team decide what to put in your pickle jar?*
- *Was each person's voice heard? Did everyone have a chance to contribute?*
- *What could you do better next time as far as teamwork?*

Check for understanding

- *How do you pickle something?*
- *Why do people pickle foods?*
- *How do pickles support healthy bodies?*

ADAPTATIONS

Garden Setting: Have teams of students harvest the summer fruits and herbs from the garden to make your quick pickles.

Literacy Extension: For the second session, use the activity described in lesson Poetic Produce as a way for students to get to taste the various pickles and describe the flavors.

ACADEMIC CONNECTIONS

English Language Arts Common Core State Standards

CCSS.ELA-LITERACY.L.3.5

Demonstrate understanding of figurative language, word relationships and nuances in word meanings.

CCSS.ELA-LITERACY.L.3.5.B

Identify real-life connections between words and their use (e.g., describe people who are *friendly* or *helpful*).

Recipe Cards

RECIPE: _____ _____		
INGREDIENTS: _____ _____ _____ _____ _____ _____ _____	STEPS: _____ _____ _____ _____ _____ _____ _____	

RECIPE: _____ _____		
INGREDIENTS: _____ _____ _____ _____ _____ _____ _____	STEPS: _____ _____ _____ _____ _____ _____ _____	

DESCRIPTIVE FOOD WORDS

