

Kitchen Lesson K6-4

Autumn Harvest Soup

Communication

Students “pay it forward” by making stock for the following class and using stock made for them by the previous class as a base for their soup.

Academics

This lesson fulfills Common Core State Standards for determining the meaning of words; integrating visual information; integrating information; following precisely a multistep procedure; integrating quantitative or technical information; collaborative discussions; interpreting information; presenting claims and findings; adapting speech; standard English grammar; knowledge of language; and acquiring words and phrases.

Sustainability

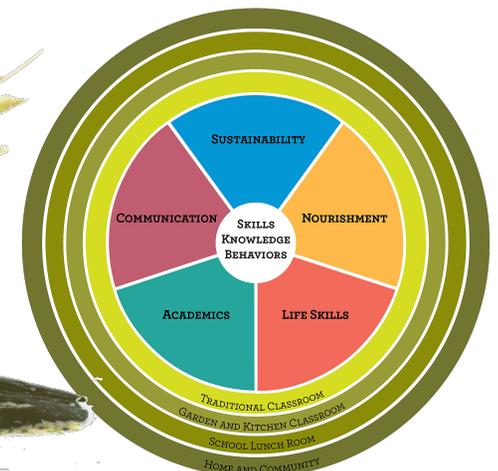
Autumn has the most abundant harvest of the year, which is perfect for soup, because ingredients for a soup can change according to the season. Making stock out of scraps and leftovers from vegetables for soup diverts food waste.

Nourishment

Students learn how to make a simple vegetable stock, an ingredient that is often high in sodium and additives when bought at the store, and a vegetable soup.

Life Skills

Students learn that different vegetables and various parts of the same vegetable may cook at different rates, that a recipe can be flexible, and to taste and adjust seasonings as they cook.



Autumn Harvest Soup Abstract

Summary

In this 6th grade humanities lesson, students prepare a soup with vegetables **harvested** from the fall garden while they practice knife skills and learn the basics of making stock.

Objectives

After this lesson, students will be able to:

- Understand how to make **vegetable stock**
- Demonstrate basic knife skills and care
- Read and follow a recipe to make Autumn Harvest Soup
- Taste the soup and adjust seasoning

Assessments

During this lesson, students will:

- Prepare the vegetables for the Autumn Harvest Soup and sort the remaining parts for the stockpot or the compost
- Choose the proper tool for the job
- Follow the recipe to completion
- Taste and season the soup

Communication is strengthened as students “pay it forward” by making stock for the following class and using stock made for them by the previous class as a base for their soup. **Sustainability** is highlighted by discussing seasonality and how autumn has the most abundant **harvest** of the year, brainstorming how ingredients for a soup might change according to the season and by making a **vegetable stock** using scraps and leftovers from vegetables for soup, which diverts food waste. **Nourishment** is acquired by making a simple **vegetable stock**, an ingredient that is often high in sodium and additives when bought at the store, for a vegetable soup. **Life Skills** are sharpened as students learn that different vegetables and parts of the same vegetable may cook at different rates, that a recipe can be flexible, and to taste and adjust seasonings as they cook.

Academics fulfill Common Core State Standards in ELA for determining the meaning of words; integrating visual information; integrating information presented in different media or formats; following precisely a multistep procedure; integrating

quantitative or technical information; engaging effectively in a range of collaborative discussions; interpreting information presented in diverse media; presenting claims and findings; adapting speech to a variety of contexts and tasks; demonstrating command of standard English grammar; using knowledge of language and its conventions; and acquiring words and phrases. See **Connections to *Academic* Standards** below for details.

Edible Schoolyard curriculum emphasizes developing community and personal stewardship, along with skills that will help students navigate different situations throughout their lives; read and follow **recipes**, and understand that some recipes are flexible and some are specific. See **Connections to *Edible Schoolyard* Standards** below for details.

This lesson follows the BEETLES Project's *Learning Cycle* (Invitation-> Exploration -> Concept Invention -> Application -> Reflection) and uses their *Discussion Routines* (Think-Pair-Share, Whip-Around). All are highlighted in **Green*** with an asterisk for easy identification. See the documents BEETLES_Discussion_Routines.pdf and BEETLES_Learning_Cycle.pdf included in **Resources** below for more information. Games and activities from other sources are also identified in **Green**, without an asterisk.

Connections to *Academic* Standards

Common Core State Standards, English Language Arts and Literacy, Grade 6

- RH.6.4 Determine the meaning of words and phrases as they are used in a text, including vocabulary specific to domains related to history/social studies.
- RH.6.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.
- RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
- RST.6.3 Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.
- RST.6.7 Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
- SL.6.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher- led) with diverse partners on *grade 6 topics, texts, and issues*, building on others' ideas and expressing their own clearly.
 - SL.6.1.b Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
 - SL.6.1.c Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.

- SL.6.1.d Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
- SL.6.2 Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
- SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.
- SL.6.6 Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 6 Language standards 1 and 3 on page 53 for specific expectations.)
- L.6.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
 - L.6.1.a Ensure that pronouns are in the proper case (subjective, objective, possessive).
 - L.6.1.b Use all pronouns, including intensive pronouns (e.g., *myself*, *ourselves*) correctly.
 - L.6.1.c Recognize and correct inappropriate shifts in pronoun number and person.
 - L.6.1.d Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).
- L.6.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.
 - L.6.3.a Vary sentence patterns for meaning, reader/ listener interest, and style.
 - L.6.3.b Maintain consistency in style and tone.
- L.6.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

Connections to *Edible Schoolyard* Standards

Edible Schoolyard 3.0

In the Edible Schoolyard Program

- 1.0: Students work with each other and teachers to develop community and personal stewardship, along with skills that will help them navigate different situations throughout their lives.
- 1.1.1 – 1.3.12: This lesson fulfills all Edible Schoolyard Program standards, numbers 1.1 through 3.12. See *The Edible Schoolyard Berkeley Standards* for details.

In the Kitchen Classroom, 6th grade

- Tools 2.1.3: Identify different **knives** from the ESY Toolbox and demonstrate basic knife skills, safety, and care with guidance.
- Techniques 2.2.6: Read and follow **recipes**, and understand that some recipes are flexible and some are specific.
- Techniques 2.2.7: **Taste** finished dishes and discuss their sensory observations using descriptive vocabulary

Autumn Harvest Soup Lesson

Materials

For the Chef Meeting

- K6-4 Visual Aid
- Autumn Harvest Soup recipe
- Ingredients and tools for demonstration

Ingredients

For the Autumn Harvest Soup

- Olive oil
- Leeks
- Carrots
- Celery
- Garlic
- Pumpkin
- Winter Squash
- Assorted greens
- Tomatoes
- Thyme
- Parsley
- **Vegetable stock**
- Bulgur
- Chard
- Tomatoes
- Salt
- Pepper

Tools

- Two stockpots

- Strainer
- Garlic peeler
- Wooden spoon
- **Ladle**
- Chef knives
- Paring knives
- Cutting boards
- Measuring beaker
- Measuring cups
- Measuring spoons

Equipment

- Stove

Timeline Overview

Total Duration: 90 minutes

1. *Invitation** (10 minutes)
2. *Concept Invention** (10 minutes)
3. *Application** (60 minutes)
4. *Reflection** (10 minutes)

Before you Begin

- Create the Visual Aid
- Copy the Autumn Harvest Soup recipe to hand out
- Prepare the **vegetable stock** (for the first class)
- Soak the bulgur
- Collect all the tools and ingredients, and then distribute them to the tables
- Gather supplies for the Chef Meeting
- Warm **vegetable stock** on the griddle

Procedures

At the Chef Meeting (10 minutes)

1. **Invitation*:**

- a. Welcome students and introduce the Autumn Harvest Soup recipe.
- b. Explain that Autumn Harvest Soup is a seasonal recipe and that the largest **harvest** of the year is in the fall.
- c. Invite students to name vegetables that are in season.

2. **Concept Invention*:**

Students learn about the autumn **harvest** and making **vegetable stock**.

- a. Describe the difference between a recipe that needs to be followed precisely and a recipe like Autumn Harvest Soup, which is flexible.
 - i. A flexible recipe can be adjusted with what is in the garden or on hand.
- b. Review that different vegetables and various parts of the same vegetable can cook at different rates.
- c. Divide vegetables into two categories, based on how long they take to cook.
- d. Introduce the term **vegetable stock**.
 - i. Explain that cold water, heated slowly over low heat extracts flavor from the vegetables.
- e. Emphasize which parts of the vegetables will be used for the soup, for the stock, or put into the compost.
- f. Review the ingredients and steps of the recipe.

At the Table

3. **Application*:**

Students work together to make soup and stock.

- a. Meet with the table groups to review the recipe and assign jobs
- b. Identify the knives used for mincing and dicing and demonstrate both techniques.
- c. Prepare the recipe.
- d. Ask students to taste the soup and adjust the seasoning.
- e. Set the table; eat; clean up.

At the Closing Circle

4. **Reflection*:**

Ask students to share what their part in preparing the recipe was, and which tool or technique they used.

Vocabulary

Vegetable stock

Harvest

Dice

Ladle

Contributors

All lessons at the Edible Schoolyard Berkeley are developed in collaboration with the teachers and staff of the Edible Schoolyard and Martin Luther King Jr. Middle School.

Learning Cycle and Think-Pair-Share discussion routine © The Regents of the University of California. All materials created by BEETLESTM at The Lawrence Hall of Science.

Resources

K6-4_Visual_Aid.pdf

K6-4_Autumn_Harvest_Soup_And_Stock_Recipes.pdf

BEETLES_Learning_Cycle.pdf (See lesson G6-0)

BEETLES_Discussion_Routines.pdf (See lesson G6-1)

BEETLES_Walk_And_Talk.pdf (See lesson G6-4)



AUTUMN HARVEST SOUP

4 TABLESPOONS OLIVE OIL

AROMATICS:

- 3 CARROTS
- 1 ONION
- 3 STALKS CELERY
- 4 LOVES GARLIC
- 6 SPRIGS ASSORTED FRESH HERB SUCH AS PARSLEY, THYME, OREGANO OR BASIL



CRUNCHY VEGETABLES:

3-4 CUPS CRUNCHY VEGETABLES SUCH AS: SQUASH, POTATOES, PUMPKIN BEETS, OR TURNIPS



1) IN A LARGE SOUP POT HEAT THE OLIVE OIL OVER MEDIUM HEAT. PEEL AND CHOP THE ONION AND THE CARROTS. CHOP THE CELERY. PEEL AND MINCE THE GARLIC. CHOP THE LEAVES OF THE HERBS. (SAVE ALL THE PEELS, STEMS AND TRIMMINGS FOR THE VEGETABLE STOCK.) ADD THE AROMATICS TO THE OLIVE OIL AND SAUTE FOR FIVE MINUTES.

2) PEEL AND CHOP THE CRUNCHY VEGETABLES AND THEM TO THE SOUP POT. (AGAIN SAVE ALL THE PEELS, PULP AND SEEDS FOR THE VEGETABLE STOCK.)

3) ADD THE STOCK AND TOMATOES AND SIMMER FOR 5-10 MINUTES, TILL VEGETABLES ARE TENDER.

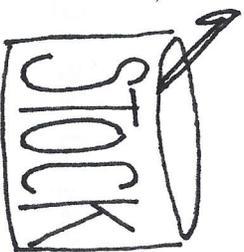
4) CHOP THE LEAFY GREENS AND ADD THEM TO THE SOUP POT. SEASON WITH SALT AND PEPPER. SHARE WITH FRIENDS AND FAMILY!

LEAFY VEGETABLES:

1 BUNCH LEAFY GREENS SUCH AS: CHARD, KALE, SPINACH, COWARDS

8-10 CUPS VEGETABLE STOCK

5 TOMATOES - FRESH OR CANNED DEPENDING ON THE SEASON  SALT AND PEPPER TO TASTE 



PEELS
STEMS
PULP
SEEDS



VEGETABLE STOCK

BASIC:

- 1 GALLON COLD WATER
- 2 CARROTS
- 1 ONION
- 4 STALKS OF CELERY
- 1 TEASPOON WHOLE PEPPERCORNS

CAN ALSO ADD:

- . CARROT PELTS.
- . PULP FROM PUMPKINS.
- . SQUASH PELTS.
- . KALE STEMS.
- . CELERY LEAVES.
- . CELERY STEMS.
- . BEET PELTS.
- . SPINACH STEMS.
- . GARLIC PELTS.
- . TOPS OF LEEKS.

POUR ONE GALLON OF COLD WATER INTO A LARGE POT. WASH AND ROUGHLY CHOP THE CARROTS, ONION, AND CELERY AND ADD THEM TO THE POT. ADD IN THE WHOLE PEPPERCORNS AND ANY ADDITIONAL VEGETABLE PELTS, SCRAPS ETC...

HEAT SLOWLY OVER MEDIUM HEAT - DO NOT RUSH AS THE SLOW HEAT IS WHAT BRINGS OUT THE FLAVORS. DO NOT BOIL. SIMMER FOR UP TO 3 HOURS. STRAIN OUT THE VEGETABLES AND PUT THEM IN THE COMPOST AS THEY DON'T HAVE MUCH FLAVOR NOW, IT'S IN THE LIQUID! STORE YOUR VEGETABLE STOCK IN THE REFRIGERATOR OR FREEZER.

