Objective
Students will learn about the history of soup. Students will learn about volume while making soup. Students will conduct surveys to compare favorite types of soups.

Background
Soup is an ancient food, prepared for 6,000 years in many different ways around the world. In ancient India, parched barley was ground with juices to make one kind of soup. Ancient Mayans used maize in various liquid foods. Early North American Indians made a broth of hickory nut milk. Yosemite Indians shredded fungi for mushroom soup and also cooked horse chestnut gruel. The Greeks made soups of beans, peas or lentils. Some were made from a black broth of pork, blood, vinegar, salt and seasonings.

In early times, soup was called “pottage” (from pot and the Latin potare, meaning, “to drink”), but by the Middle Ages, the word “soup” had replaced “pottage” in most European languages. The word soup is thought to have come from the sound made by slurping hot liquid from a spoon. Some variations of the word are soop, sopa, sope, soepe, suppa, soppe, suppe, sopra, soupe, chupe, zuppa, and zup. To sup was to eat the evening meal, at which soup was traditionally served. Eventually the meal itself became “supper.”

As immigrants arrived in the US from countries around the world, they brought their own national soups. German immigrants living in Pennsylvania were famous for their potato soups.

Commercial soup became popular with the invention of canning in the 19th Century. Dr. John T. Dorrance, a chemist with the Campbell Soup Company, invented condensed soup in 1897. Most soups have stock as a base. Stock is made by simmering various ingredients in water, usually for a long period of time. Often the ingredients are less desirable cuts of meat, bones and vegetable trimmings. Herbs and spices add more flavor. The flavor of bone stock comes from the cartilage and connective tissue in the bones. The gelatin in bone broth has many health benefits. Connective tissue has collagen.
in it, which gets converted to gelatin that thickens the stock.

The use of what to some might appear as trash for making stock—bones and vegetable trimmings, may have been the basis for the old story, “Stone Soup.” Stone Soup is a Grimm Brothers tale in which strangers trick a starving town into giving them some food. The fable is about cooperation amid scarcity. In different traditions, the stone is replaced with other common objects; therefore, the fable is also known as “Button Soup,” “Wood Soup,” “Nail Soup,” and “Axe Soup.”

According to the Grimm Brothers’ story, some travelers come to a village, carrying nothing more than an empty pot. The travelers are hungry, but the villagers are reluctant to share their food. The travelers fill the pot with water, drop a large stone in it, and place it over a fire in the village square. One of the villagers becomes curious and asks what they are doing. The travelers answer that they are making “stone soup.” They tell the villager the soup is delicious but tastes even better with a little bit of garnish, which they are missing. The villager doesn’t mind parting with just a little bit to help them out, so her contribution gets added to the soup. Another villager walks by, inquiring about the pot, and the travelers again mention their stone soup, which hasn’t reached its full potential yet. The second villager hands them a little bit of seasoning to help out. More and more villagers walk by, each adding another ingredient. Finally, a delicious and nourishing pot of soup is enjoyed by all. In a French version of the tale, the three travelers are soldiers returning home from the Napoleonic wars.

A more modern version of the story occurred during the Great Depression, when some families were unable to put food on the table every day. It became a practice to place a large and porous rock in the bottom of the stock pot. On days when there was no food, the stone was boiled up, and the flavor would come out of the stone into the water, producing a weak soup, which was at least better than not eating anything.

**Activities**

Read and discuss background and vocabulary.

**LANGUAGE ARTS**

1. Hand out copies of the story “Oklahoma Stone Soup,” included with this lesson.
   - Students will take turns reading the story out loud.
   - Hand out copies of the sequencing worksheet.
   - Students will answer the questions on the worksheet.
   - Create a Venn diagram or T chart to compare/contrast “Oklahoma Stone Soup” and *Stone Soup*.
3. Students will act out the story of “Oklahoma Stone Soup,” included with this lesson.
   - Students will take turns adding ingredients as the story progresses.
   - Discuss the story. Why were the settlers more willing to share their food after the cowboy started cooking the stone soup? What lesson do
students take from the story? Discuss how everyone’s contribution is needed in a community, just as all the contributions to the soup made enough for everyone to eat.

4. After reading “Oklahoma Stone Soup” students will answer the following comprehension questions:
— What does “with great ceremony” mean in paragraph 4? (made a big deal or big show of it)
— What was the cowboy suggesting when he said, “Of course, stone soup with tomatoes – that’s hard to beat.”? (that someone should get some tomatoes to add to the soup)
— Was it the magic stone that caused the soup to taste good? If not, what was it? (the variety of items they all put in and that they all worked together to make it)

— Discuss the term “onomatopoeia” (words that sound like the object they name or the sounds those objects make).
— Students will identify the onomatopoeic words found in Who Grew My Soup? (Yikes, zoom, whoosh, whir, boom, pop, whiz)
— Students will create onomatopoeic art. For ideas, use an online search engine and search “onomatopoeia images.”

6. While reading Who Grew My Soup?, pause at the end of rhyming stanzas to see if students can complete the rhyme.
— Make a list of the rhyming words found in the book.
— Encourage students to think of other words that rhyme with each word on the list.

7. Discuss the figurative language found in Who Grew My Soup?
— Farmer Perez is described as having “thumbs that are quite green.”
— They traveled “in the blink of an eye.”

MATH
1. Send home the parent letter included with this lesson requesting ingredients for stone soup.
2. On the day before soup-making day, gather the ingredients for the soup, and bring samples of the whole vegetables to show students.
— Students will write descriptions of each whole vegetable.
3. Students will develop appropriate charts for recording observations of each soup ingredient before and after cooking.
— Provide diced samples of each vegetable for students to taste raw.
— Students use taste, sight and smell to write observations about vegetables.
— Students vote on their favorite raw vegetables and graph the results.
— Students predict what raw vegetables will look like after they have cooked in the crock pot for four hours.
— Show students the raw meat to be used (diced and well-sealed in plastic bags.)
— Students will describe the raw meat and predict what it will look like after it has been cooked in the crock pot for four hours.
4. Students classify vegetables—roots (potatoes, carrots, onions), leaves (greens), stems (celery), fruit (Can a fruit be a vegetable? tomatoes, peas, etc.)
5. Students calculate the volume of diced vegetables and record measurements.
— Students add up volume of all vegetables.

**Materials**
crock pot
2 cups water in a pitcher
bowls
spoons
measuring cups
food thermometer
beef chuck roast, pork roast or chicken, cubed

At least three of the following vegetables commonly grown in Oklahoma gardens:
tomatoes
carrots
corn
potatoes
green beans
peppers
okra
squash
onion
—Students calculate the volume of diced meat. Students will add the volume of the meat to the total volume of all vegetables.

6. On soup-making day, set up the crock pot in front of the class. Provide water and a clean stone.
—Students will calculate the volume of water and add the water volume to the total of ingredients measured earlier.
—Students will determine the temperature of the soup before cooking begins.

7. Allow soup to cook four hours on the crockpot’s high setting.
—Students measure temperature of soup after cooking.
—Carefully pour one cup of soup for each student.
—Students will tally the cups of soup taken from the pot and record that number or count the number of students having a cup of soup.
—Carefully determine the volume of the soup that remains in the pot.
—Students will add that amount to the number of cups taken from the pot earlier.
—Students will compare that volume with the volume recorded before cooking.
—Discuss any difference between starting volume and ending volume. What happened to the soup that disappeared?
—Students taste soup and vote on their favorite cooked ingredient. Graph the results.

8. Students will list the vegetables they used in their soup.
—Create a graph showing all of the vegetables.
—Survey students to determine which vegetable is the class favorite.
—Students will each survey 10 people outside of class to see which of the vegetables is the favorite.
—Tally the votes as a class. Record the results on the graph.
—Students will compare their own favorite vegetable in the soup with the favorite vegetable of the people they surveyed. Students will consider the following questions:
   a) What is the most favorite vegetable in soup of the outside survey group?
   b) What is the least favorite vegetable in soup of the outside survey group?
   c) What is the most favorite vegetable in the class?
   d) What is the least favorite vegetable in the class?
   e) Does the class like the same vegetables as the outside survey group?
   f) Is there evidence that if you like one vegetable you tend to like another? For instance, if you like corn do you tend to like potatoes?

**SCIENCE**

1. Explain to students that commercial gelatin (Jello) is made from the bones, skin and hide of animals, just as soup stock is thickened by the release of protein-rich collagen in the cartilage and connective tissue of meat bones.

2. Bring meat bones from home. They may be left over from beef roast or roasted chicken that has been cooked.

3. Cover the bones with water in a crock pot.

4. Students will use the Scientific Method Format included with this lesson to record observations of the water and bones and predict what will happen
after they bones have been cooked in the water for several hours.

5. Cook the bones in the crock pot all day, adding more water, as necessary.

6. At the end of the day, remove the bones from the water. Students will record observations, noting any changes from the beginning of the experiment.

7. Refrigerate the stock overnight. Students will predict how they think the refrigeration will change the stock.

8. Remove the stock from the refrigerator the next morning. Discuss the change in appearance. Students will record their observations.

SOCIAL STUDIES

1. Provide copies of the chart “Soups Around the World” included with this lesson.
   — Students will read the chart and discuss the different ingredients used in soups from around the world.

2. Students will use information from the chart to answer the following questions:
   — Name the soups that have chicken as an ingredient. (ajiaco, avgolemono, egg drop, pho)
   — Name the soups that have potatoes as an ingredient. (ajiaco, borscht, caldo verde, cullen skink)
   — Name the soups that have tamarind as an ingredient. (tom yam)
   — Which soups are from countries in Europe? (avgolemono, borscht, bouillabaisse, caldo verde, cullen skink, erwensoep, fasolada, gazpacho, goulash, minestrone, Scotch broth, solyanka, tarator)
   — Which soups are from countries in Africa? (fufu and egusi)
   — Which soups are from countries in the Americas? (ajiaco, fanesca)
   — Which soups are from countries in Asia? (egg drop, tom yam)

3. Students will list all the unfamiliar ingredients on the chart and look online or in a dictionary to find out what they are.

4. Students will list all ingredients and create a graph to show how often each ingredient is used.

5. Plan and conduct a soup night for parents or another class.
   — Students divide into groups. Each group selects one of the soups described in the “Soups Around the World” chart.
   — Students will use online search engines or library resources to find recipes for the soups they have selected.
   — Students write stories about their soups, based on the “Stone Soup” story.
   — Students prepare the soups for their guests and present their stories.

6. Students will find Europe, Africa, the Americas, and Asia on a map. Students will find the countries listed on the chart. Students will find the United States.

Extra Reading

Solheim, James, and Eric Brace, It’s Disgusting and We Ate It! True Food Facts from Around the World and Throughout History, Aladdin, 2001.
Oklahoma Stone Soup

Times were rough back in the early days of Oklahoma Territory, and people didn’t always have enough to eat. One day a cowboy rode into a settlement and began asking questions, as if he planned to stay for the night.

“There’s not a bite to eat in the whole place,” he was told. “Better keep moving on.”

“Oh, I have everything I need,” he said. “In fact, I was thinking of making some Oklahoma Stone Soup to share with all of you.”

He pulled an iron pot from his saddle bag and built a fire under it. Then, with great ceremony, he drew an ordinary-looking stone from a leather bag and placed it carefully in the bottom of the pot before filling the pot with water.

By now, hearing the rumor of food, most of the settlers had come to see what was going on. As the cowboy sniffed the “broth” and licked his lips in anticipation, hunger began to overcome their skepticism.

“Ahh,” the cowboy said to himself rather loudly, “I do like a tasty stone soup. Of course, stone soup with potatoes—that’s hard to beat.”

Soon a settler approached hesitantly, holding some potatoes she had gathered from her garden and added them to the pot.

“Wonderful!” cried the cowboy. “You know, I once had stone soup with potatoes and a bit of meat as well, and it was fit for a king.”

The local butcher managed to find some meat. . . and so it went, through tomatoes, onions, carrots, okra, corn and so on, until there was indeed a delicious meal for all. The settlers offered the cowboy a great deal of money for the magic stone, but he refused to sell and traveled on the next day. And from that time on they talked about the finest soup they’d ever had.
Stone Soup: Sequencing

1. When were the potatoes added to the soup?
   a. after the okra
   b. after the meat
   c. after the stone

2. When was the meat added?
   a. after the stone
   b. after the tomatoes
   c. after the potatoes

3. What was added after the onions?
   a. okra
   b. the stone
   c. carrots

4. Put these sentences in the correct order by numbering them 1-3.
   _____The settlers offered to buy the stone from the cowboy.
   _____The settlers added potatoes, onions, carrots, okra, and so on.

5. What would you have added to the soup?

6. What would you have left out?
Dear Parents,

On our class will be learning about the history of soup, soup around the world, and soup ingredients that are grown in Oklahoma. We will be making soup and reading the story, “Oklahoma Stone Soup.” To make the soup, we will need the following fresh ingredients:

- cubed beef, pork or chicken
- tomatoes
- carrots
- corn
- potatoes
- green beans
- peppers
- okra
- squash
- onion
- fresh herbs

We need fresh ingredients so students can compare these foods before and after they are cooked. We will be weighting, measuring and comparing by taste, sight and smell. If you can provide any of these fresh ingredients, please let me know. The ingredients should be diced and secured in quart-size plastic bags.

Thanks for your help.

Oklahoma Ag in the Classroom is a program of the Oklahoma Cooperative Extension Service, the Oklahoma Department of Agriculture, Food and Forestry and the Oklahoma State Department of Education.
# Soups Around the World

<table>
<thead>
<tr>
<th>SOUP NAME</th>
<th>INGREDIENTS</th>
<th>COUNTRY OF ORIGIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ajiaco</td>
<td>chicken, corn, potatoes, sour cream, capers, avocado, guasca</td>
<td>Columbia</td>
</tr>
<tr>
<td>avgolemono</td>
<td>chicken, lemon, egg</td>
<td>Greece</td>
</tr>
<tr>
<td>borscht</td>
<td>beets, beef, onion, carrots, potato, cabbage, sour cream</td>
<td>Russia, Ukraine</td>
</tr>
<tr>
<td>boullabaisse</td>
<td>fish and shellfish, garlic, orange peel, basil, fennel, saffron</td>
<td>France</td>
</tr>
<tr>
<td>caldo verde</td>
<td>potatoes, collard greens, cabbage, kale, sausage</td>
<td>Portugal</td>
</tr>
<tr>
<td>cullen skink</td>
<td>smoked haddock, potatoes, onions and cream</td>
<td>Scotland</td>
</tr>
<tr>
<td>egg drop</td>
<td>eggs, chicken broth</td>
<td>China</td>
</tr>
<tr>
<td>erwensoep</td>
<td>peas</td>
<td>Netherland</td>
</tr>
<tr>
<td>fanesca</td>
<td>cod, feta cheese, lentils, carrots, corn, squash, heart of palm</td>
<td>Ecuador</td>
</tr>
<tr>
<td>fasolada</td>
<td>white beans, olive oil, vegetables</td>
<td>Greece</td>
</tr>
<tr>
<td>fufu and egusi</td>
<td>vegetables, meat, fish, balls of wheat gluten</td>
<td>Ghana</td>
</tr>
<tr>
<td>gazpacho</td>
<td>bread, tomato, pepper, garlic, olive oil</td>
<td>Spain</td>
</tr>
<tr>
<td>goulash</td>
<td>beef, onions, red peppers, paprika</td>
<td>Hungary</td>
</tr>
<tr>
<td>minestrone</td>
<td>pasta, beans, onions, celery, carrots, tomatoes</td>
<td>Italy</td>
</tr>
<tr>
<td>pho</td>
<td>beef or chicken, onion, ginger, basil, spices</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Scotch broth</td>
<td>barley, beef or lamb, carrots, turnips, cabbage, leeks</td>
<td>Scotland</td>
</tr>
<tr>
<td>solyanka</td>
<td>meat, fish or mushrooms and pickled cucumbers, cabbage, dill</td>
<td>Russia</td>
</tr>
<tr>
<td>tarator</td>
<td>yogurt, cucumbers, garlic, nuts, dill</td>
<td>Bulgaria, Macedonia</td>
</tr>
<tr>
<td>tom yam</td>
<td>lemongrass, lime leaves, galangal, shallots, lime juice, fish sauce, tamarind, chilis</td>
<td>Thailand</td>
</tr>
</tbody>
</table>
Scientific Method Format

Title of Experiment or Study:

I. Stating the Problem:
   What do you want to learn or find out?

II. Forming the Hypothesis:
   What is known about the subject or problem, and what is a prediction for what will happen?

III. Experimenting: (Set up procedures)
   This should include: materials used; dates of the experimental study; variables, both dependent and independent (constant and experimental); how and what was done to set up the experiment; fair testing procedures.

IV. Observations:
   Includes the records, graphs, data collected during the study.

V. Interpreting the Data:
   Does the data support/defend the hypothesis?

VI. Drawing Conclusions:
   Justify the data collected with concluding statements about what has been learned. Discuss any problems or concerns. Use other studies to support the conclusion. Give alternative ideas for testing the hypothesis.