Yale-New Haven Teachers Institute

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2009 Volume III: Science and Engineering in the Kitchen

A Taste of Korea: A Chemistry-Geography Adventure!

Curriculum Unit 09.03.03
by Waltrina D. Kirkland-Mullins

In today's teaching environment, teachers are often confined to restrictive time frames and scripted curriculum. As adept practitioners, we know that learning is experiential, that we must empower young learners through the use of interactive, engaging activities--strategically applying these teaching modalities while maintaining and meeting district goals. With hands often strapped, how do we motivate young learners in the classroom setting while adhering to mandated requirements? Integrating subject matter is one sure-fire way of achieving this end. A Taste of Korea: A Chemistry - Geography Adventure has been created to address this challenge.

Targeted at students ages 7 through 9, A Taste of Korea takes an up-close look at Geography and Science through the lens of Korean culture. Through peer inter-action and engaging-hands-on activities, students--via whole group instruction and small group team research interaction--will have an opportunity to explore everything from Korean traditions and mores to the fermentation process in creating kimchi. The unit, to be conducted 2 to 3 days a week for 45-50 minutes per session, can be implemented within a 12 to 16 week time frame or expanded to accommodate the entire school year. Aligned with New Haven public school district Social Studies and Science district standards, A Taste of Korea includes a "We-Search" project, where students work in cooperative teams to research information on specific areas concerning this fascinating peninsula. This team effort--to be conducted both within and outside of the school environment--fosters social interaction and collective work ethic skills, incorporating Social Development into the learning experience. Ultimately, students will learn to celebrate others and themselves as part of the global community!

1. Setting The Tone

Key vocabulary words noted herein will be researched and investigated by our young learners. Non-fictional and fictional children book selections, interactive websites, interviews with local Korean merchants, and writing will serve as springboards to finding this information (see Annotated Bibliography).

Terms to Know

agriculture	agrarian	Buddhism	Confucianism	dynasty
emperor	hangŭl	hyŏptong nongjan	hunminchong-um	irrigation
non	pat	peninsula	plantation	rainfall fields
riceland	sharecropping	tenant farmer	terrace	yangban

Prior to beginning this study, introduce a world map. Highlight the continents and other geographic landmarks found therein. Have students locate Korea and its surrounding land masses and aquatic borders. Using photo images to visually put the accent on specific regions serves as an engaging topographic accompaniment.

Supplemental Group Research Project. Students should be divided into teams of three to four students. Each team will research two or three topics regarding Korean culture. (These team members should work together throughout the entire implementation of the unit, including our Science component.) Students will generate questions to be answered within each topic (see Attachment D created by my third graders). Members of each respective team will be in charge of finding answers to target questions. They will work collaboratively both in and outside of school to conduct research. Based on their collective findings, students will become "experts" in their topic of study and will subsequently be required to write a report based on their collective findings. They too will be required to create an accompanying poster board display presentation. The display must contain pictures and captions that accurately portray their research findings. Each team will be required to present its report and visual complement before their peers. (The report and supplemental poster board display info must be well researched, well-organized, and well-written, falling in line with New Haven public school district Language Arts curriculum mandates.)

Note that throughout the "We Search" process, the teacher serves only as a facilitator, modeling how to take notes, conduct research using book and on-line resources, and create the final report with supportive displays. So that students can effectively participate in this process, provide 8 to 12 weeks for project implementation and completion; completed projects can be presented during the 13 th through 16 th weeks. Involve parents in the process: provide them with a list of team members' names, E-mail addresses, and telephone numbers, and urge them to establish "research play dates" for their children. Where students/parents have difficulty meeting outside of classroom hours, provide in-school support, incorporating school library and internet research into center time activities. (This planning approach has proven effective for my third graders. I notified my parents of its implementation during Open House at the beginning of the school year. I subsequently followed up with a parent newsletter announcement and phone calls. Collaborative effort on behalf of both students and parents proved challenging, but effective: out of 7 teams constituting 23 students, each team completed their project)!

A Bit About Korea

Based on my recent travel, Korea is a fascinating land filled with high-rise buildings and super-highways, technological advancements, thriving port cities, and trend-setting fashion, interspersed with simplistic countryside living and historic remnants of the past. Despite modernization, the spirit of the people and culture maintains adherence to Confucian values, pride among its people, and a love of nation to be admired. Known as the Land of the Morning Calm, Korea is a peninsula that extends southward from Asia. Although it is one land mass, Korea is divided into two nations: the Democratic People's Republic of Korea or DPRK (North Korea, a communist nation lead by President Kim Jun-Il) and the Republic of Korea or ROK (South Korea, a democratic nation under the leadership of President Lee Myung-Bok). To the west, it is surrounded by the Yellow Sea; the East Sea aligns with its eastern shore, and its southern border is surrounded by the Pacific

Ocean. 70% of the region is mountainous, particularly on its eastern coast. It has several major rivers: the largest is the Amnokkang River (790 km). Others include the Tuman-gan and the Naktonggang Rivers in the north, and the Hang-gang River which is 514 kilometers in the south. Mt. Paektu is the highest mountain on the peninsula; Mt. Halla, another of its tallest peaks, constitutes its neighboring island and major tourist attraction, Jeju-do (pronounced "Cheju-do").

As of July 2009, approximately 49 million people inhabit Korea, with 81% of the population living in urban areas. A homogeneous society, Koreans take pride in their country and adhere to strong nationalist ideals.

Seoul is one of the country's major cities. As of 2009, over 10 million people are reported to reside there. Pusan, Taegu, Inchon, Kwangju, and Taejon are among other major cities in the region. Religious freedom is provided for in the country's constitution. Major religions within Korea include Buddhism (approximately 23%), Protestant Christianity (approximately 20%), Catholicism (approximately 7%); coupled with Confucianism, Shamanistic practices (approximately 1%), and non-religious affiliations (approximately 49%). Religious practitioners with differing views coexist within the society.

The country's climate is similar to that of the United States, for it enjoys four seasons. The weather patterns, however, significantly differ. Spring and autumn are short, with a blend of many days filled with sunshine and occasional crisp, cool days that require one to wear a light jacket. Located in the East Asian monsoon belt, Korea is hot and humid during the summer, with primary rainfall beginning at the end of June. The winters are brutally cold and dry, with occasional snow. Winter weather is at times impish in that severe cold weather is on occasion unexpectedly interspersed with warm weather, spring-like days.

Math & Logical Thinking Extra: Highlight that by plane, on a non-stop flight, it takes 14 hours to travel from New York City to South Korea. Ask students whether they think it would take more or less time travel east, across the Atlantic Ocean or west, across the United States and the Pacific Ocean, to reach this Asian country. (My children were astounded to learn that the latter was the most expedient, time-saving route!) Use a globe to model the flight patterns and distances from both directions.

Economy

Since the 1960s, South Korea has achieved an incredible record of growth and integration into the high-tech modern world economy. Computer technology and electronics are in the forefront as evidenced throughout business districts, colleges and universities, and seen in daily life overall. (When I visited the region, it seemed everyone was toting blackberries, computer games, and I-Pods. Observing this first-hand was remarkable, particularly knowing that only four decades ago, the country's economic stance per capita was comparable with levels in the poorer countries of Africa and Asia.)

Today, South Korea is a major competitor in the world's economy. In addition to being a world leader in the electronics industry (e.g., Samsung), major industries in South Korea include textiles, petro-chemicals, steel, automobiles (like (Hyundai, manufacturer of the popular Genesis sedan), and shipbuilding. Agriculturally, the country's major products are rice, barley, and wheat.

Education

Education is a top-priority item throughout Korea. It appears everyone from elementary school to collegiate levels takes pride in attending school. The country's educational system is divided into three levels: primary school (attended for six years), middle school (three years), and high school (three years). Primary school is

mandatory for children ages 6 through 11. Students strive to give their best at all levels and are immersed in eight core courses that generally include Korean Language, Mathematics, Science, Social Studies, Ethics, Music, Fine Arts, and Physical Education. Students in middle school are required to take additional subjects; English, technical, and/or vocational topics are taken as electives. By high school, students are prepared to choose between general education and vocational choices. (A typical middle-school day runs from 7:30 a.m. through 4:30 p.m., to as late as 11:00 p.m. with the inclusion of electives coupled with private tutoring. There is no doubt as to why the country boasts a literacy rate of approximately 98%!) Entering high school is a rigorous process, and competition to subsequently attend college is intense. Students who attend college and universities do so within four or two years, with graduate courses leading to Ph.D. degrees. (Whether or not they attend college, men must serve in the military for two years; some take off from college to carry out this obligation.)

Past History

Many historians believe that the first founding kingdoms on the Korean peninsula began with the Shilla (57 BC) and Paekche (18 BC) in southern Korea and Koguryŏ (37 BC) in the north. According to Korean historians, The Shilla and Paekche kingdoms were the most prosperous because of their fertile farmland and surrounding waterways. The Shilla kingdom was known for hemp and hemp cloth production, textile manufacturing, and rice and millet production. The Koguryŏ kingdom was known for its grain production and salt and fish export. These two kingdoms primarily traded goods with China. The Paekche kingdom, which traded primarily with Japan, was known for its gold, iron, and other manufactured goods. These territories combined were known as the Three Kingdoms.

The Three Kingdoms' reign was followed by the The Koryŏ monarchy (918 AD-1392 AD), under which Buddhism flourished. Thirty-four kings ruled under the Koryŏ monarchy. This kingdom was followed by the Chosŏn dynasty (1392 AD), ruled by Yi Song-gye (posthumously referred to as King Taejo). Confucianism flourished under King Taejo's rule. King Taejo's kingdom emerged as a strong and stable one. He named his empire the Land of the Morning Calm. Great agricultural advancement took place during this period.

King Sejong was the fourth ruler of the Chosŏn dynasty. He is said to have brought progressive ideas in the areas of government administration, economics, Science, Music, medical science and humanistic studies to his nation. King Sejong embraced the peasant population of his country, understanding literacy was crucial for all people. Aware that his people must have a writing system designed to express the language of everyday speech was deemed hunmin chong-um or "script for the people." Under his leadership, the Korean alphabet, known as hangŭl, was created. King Sejong's leadership and contributions to Korean culture continues to be acknowledged and revered today.

History also reveals that multiple external invasions impacted the country since the beginning of time (for example, the Mongol invasion took place in 1231 and lasted until the late 1380s, impacting the Koryŏ dynasty). In 1910, invasion continued, for the country was overtaken by Japan and forced to become a

Japanese colony, thereby ending the Chosŏn Dynasty. With it--as had occurred in the past--came the influence and infusion of the colonizing cultures. Nevertheless, in each instance, the Korean people fought to maintain their own identity.

In this regard, we turn to the 20 th century. The desire to overthrow colonial rule was strong among Korean people: on August 15, 1945--after 35 years of colonial rule--Korea regained its independence. Thereafter, conflict broke out within the country; its people were divided. Soviet forces, with whom many of Korea's countrymen agreed, occupied the northern part of the peninsula. Many Koreans were in favor of a democratic society like that of America. Aided by United States military forces, these individuals inhabited the southern portion of the land. On September 9, 1948, the Democratic People's Republic of Korea was established in the North with Pyongyang as its capital. On August 15, 1948, the People's Republic of Korea was inaugurated with Seoul as its official capital. Although a cease-fire agreement exists between North and South Korea, no peace treaty has been signed between these two nations. The divisive scar between North and South Korea formed during this period still exists today; the country to date remains divided.

Family Structure Then and Now

Extended family constituted the family structure during early times. Traditionally, all family members worked together, carrying out specific roles and responsibilities. (Large numbers of children were desired, and families lived in the same compounds. Women typically carried out such household responsibilities as caring for the children AND cooking.) Homes were commonly built in single-story structures in L and/or U shapes. The house consisted of a living room, kitchen, and lavatory area. A large house would consist of these and additional quarters for maids and servants, a barn, and areas for guests and their servants. Today, with urbanization on the rise, nuclear versus extended families are becoming the norm. Many families today live in high-rise apartments or private townhouses within major cities.

2. More Than A Dining Experience

Eating foods created by people from other countries is one of the best ways to introduce ourselves to new cultures. Doing so, however, is more than the simple sampling of new and/or unfamiliar dishes. How do the history and the availability of natural resources play into it all? How do mores and culture, class and social status, factor into food creation? Let's take look from a Korean perspective!

More Terms to Know

banchan	bibimbap	bulgogi	brine	glutinous rice	gochujang
kimbap	kimchi	millet	mung	kaoliang	jook

Agriculture Past & Present

Prior to World War II, tenant farming was a serious problem in South Korea. Japan's leaders exploited Korea, dominating the farming and fishing industry within the peninsula. Under Japanese rule, many Koreans lost their land and faced serious food shortages. In many instances, they were forced to grow and supply food to their colonizer. Sharecropping--where peasant farmers as tenants owned no land, yet worked the land and

shared the output of food production with the land owner--discouraged innovative farming. This practice created political unrest and resulted in land reform in North Korea known as hyŏptong nongjan--or cooperative farms.)

The majority of Koreans subsisted by peasant agriculture: many Korean farmers owned small plots of land approximately 1.5 acres in size. Some served as tenant farmers (paying rent to work on the land), while others served as sharecroppers. Land was usually divided into two categories: riceland and rainfall fields. Riceland (referred to as "non") was used for the irrigation and production of rice. Rainfall fields (referred to as "pat") were used for unirrigated grain, bean crops, vegetables, and orchards. The ability to grow crops was contingent on several factors: i.e., household needs and environmental conditions like weather conditions, the availability of irrigation water, and the amount of rainfall. Oftentimes, crops had to be grown on leveled terrain and/or terraced fields, particularly for the growing of rice. Approximately two fifths of the land was used for rice cultivation. Contingent on weather conditions, the remaining land mass was used as rainfall fields.

Because of the nature of farming conditions, each household attempted to farm each type of land so they would have a wide variety of food. Among crops grown were rice, cabbage, hot peppers, radishes, garlic, lettuce, zucchini, and other squash. Barley, millet, kaoliang (sorghum), a wide assortment of beans (including soy, red, and mung), and wheat were also grown. If space permitted, persimmon, cherries, jujubes, apples, pears, peaches, or chestnut trees were planted. In addition to food crops, hemp, ramie--a type of fine grass woven into cloth, sesame, used to make cooking oil were grown in the country's southern region. On the surrounding coastal regions, peasants commonly planted sweet potatoes; in the mountainous areas, buckwheat and white potatoes were cultivated.

Animal husbandry usually took place around major cities. Today, cattle--once used primarily as draft animals--are now raised in the hundreds of thousands for slaughter. Pigs, chickens, and ducks are raised for this purpose in such regions as Cheju-do Island. Dairy farming has also emerged around major cities. Despite this trend, industrialization and urbanization has had a negative impact on the farming industry. Although large amounts of farmland exist, the number of farmers to cultivate the crops has fallen drastically over the years.

Today, most farmers plow with small tractors. Many use chemical fertilizers to control insect pests, weeds, and more. Rice productivity has increased. Grains such as wheat are purchased on the international market. In addition to animal husbandry, Cheju-do Island specializes in the production of citrus--like Mandarin oranges. As a result of this and the above-noted factors, the standard of living in rural areas has been negatively impacted and differs significantly from the progress and success of thriving, industrialized urban areas.

A Communal Event

Customarily, mealtime in the home of Korean families is a communal affair. Traditionally, males stayed out of the kitchen; women were the masters in this domain. This particularly held true when extended family reigned supreme in Korea. Today, with more nuclear families occurring as a result of industrialization and urbanization, fewer women are locked in the kitchen. Nevertheless, traditional meals were and continue to be eaten in a communal fashion: dishes are placed in the center of the table. Those gathered around the table

often share their meals, sampling from one dish to the next. Knives are not used at the dinner table; when cutting slivers of beef or pork at the dinner table, scissors are used.

Social Status Determined

Traditionally, the number of food courses served as an indication of the social status of a household and its guests. In the Chosŏn Dynasty, for example, the royal enjoyed 12-13 course meals filled with assorted vegetable dishes, meats, rice, soups, and rice. Nine course meals were often served to aristocratic members (the yangban class). Their meals included at least three vegetable dishes and two salty condiments laden with hot spices, and sliced meats such as pork, chicken, and beef. Common folk were limited to 3 to 5 course meals consisting of a steamed grain, seasonal vegetables, and a bowl of soup. Today, meat is served to the yangban (aristocratic) and common folk alike.

Rice was the preferred grain for both the yangban and peasant classes. During the post-war, industrialization era, however, rice was so expensive that impoverished farmers and their families often sold it for cash and purchased cheaper grains like barley, millet, or kaoliang (sorghum).

Mealtime Etiquette

Despite modernization, mealtime is one aspect of Korean culture that has not changed. It remains a communal event. Go to a Korean eatery anywhere in the country, and you will find family and/or friends gathered around steaming bowls of stew, rice, and banchan (sidedishes) from which everyone partakes. Koreans agree that one of the best ways to share "chong"--feelings of camaraderie and love--are through sharing from a common pot or bowl. (I experienced this while attending an Episcopalian church in South Korea, where gregarious church members invited visitors to join in an after church-service repast. We feasted on buckwheat noodles laden with beef broth and vegetables, kimchi, green tea, and roasted peanuts for dessert. The experience filled the stomach and the soul).

As holds true in many cultures, rules apply at the mealtime table. Here are a few dos and don'ts Korean style: Do not begin or finish your meals before seniors are seated at the table. Use your spoon when eating rice and soup dishes; use chopsticks for side dishes. Do not pour drinks for others when you notice their beverage glasses are empty; do not pour a beverage for yourself; allow someone else to pour your drink for you. Use fingers ONLY when eating wrapped-leaf dishes; otherwise use chopsticks. When dining out, do not tip the waiter or waitress; tipping is considered offensive.

3. Korean Kitchen Chemistry

Korean cooking is often an experimental process. Pinches of seasoning and dashes of oil serve as measurement standards. Strong hands and seasoned years of creative culinary artistry result in distinctively delicious culinary creations. At this point in our unit, we will have an opportunity to try our hands at creating three traditional Korean dishes.

Unlike seasoned homemakers, we will focus in on the chemistry and physics that occur when creating three Korean mealtime favorites. We will observe and record our findings in a Science Lab Journal (a Composition notebook will do just fine) using corresponding Observation Worksheets (see Attachments A, B, and C) for

each cooking experiment. On the menu are kimchi, green tea, and sticky rice.

1. Kimchi… What's scientific about it?

Kimchi is a traditional vegetable dish widely eaten throughout Korea. For many outside of the culture, it is a food to which one must become accustomed. Combined with hot peppers, garlic, radishes, dried fish such as shrimp or anchovies (optional), and intact cabbage leaves and stems, kimchi is a spicy, nutritional food source. What's scientific about it is the process with which it is created, for the cabbage is fermented.

Nutrition, we know, is the ultimate goal of producing food. Korean farmers and their wives used scientific ingenuity in this regard, for as was previously stated, seasonal conditions and more impacted the production of crops. Korean housewives created kimchi to provide a vitamin-rich food source during brutally cold winter seasons--a time when no fresh vegetables were available. Kimchi proved to be an abundant, healthy option.

What is fermentation? Fermentation is a method of preserving food that has existed for centuries. Because of the process, a chemical change in sugars brought out about by the enzymes of living organisms takes place. Sauerkraut, cucumbers, olives, and Hawaiian poi (fermented taro root) are other types of food products resulting from various types of fermenting processes. No cooking is required to activate the process.

As was previously noted, cabbage is a main ingredient used in the making of kimchi. Traditionally, its ingredients were placed in sealed clay pots. These containers were subsequently filled with salt or sea water. Air was totally removed from the pots by submerging the cabbage in a saline liquid to begin the fermentation process. The cabbage was completely covered with the salt water solution to limit its exposure to oxygen, then subsequently sealed to keep the oxygen out. This acidic, alcoholic mixture surrounded the ingredients and, in time, impacted the flavor, smell, and texture of the original vegetable(s). Benign microbes began to form within the acidic, alcoholic liquid. This process also suppressed the growth of other microbes that cause spoilage and disease. The benign microbes helped to transform the covered vegetables into a spicy, tangy, nutrient-rich food source that could be used and/or stored for prolonged durations. The kimchi fermentation process is a tradition that has been handed down over the ages.

Why is salt necessary in the fermentation process? Salt or brine is used to draw water, sugars, and other nutrients out of the cabbage plant. This liquid surrounds the cabbage, preventing harmful microbes and germs from getting in.

Why were earthenware vessels used to store kimchi? Earthenware pottery was widely created and used in ancient Korea. The pottery was handcrafted and baked for durability. Their inner walls were difficult to clean completely and allowed for benign microorganisms to stay within the container. This remaining lining helped to initiate the successful fermentation of food stuffs like kimchi.

Kimchi Preparation Long Ago

Traditionally, kimchi pots were partially buried beneath the earth with lids exposed above the ground. The pots remained buried from approximately late autumn (beginning in October through November) through the end of the winter season (which depending on the locale and monsoon season temperatures, fluctuates between December through February). The country's climate during this period ranges from 41 to 57 degrees Fahrenheit. During this seasonal period, fermentation takes place within the pots: fermentation results in the cabbage mixture having an intense, spicy, crunch flavor that puts the accent on rice dishes or meat and/or soup accompaniments. By the end of the seasonal process, the kimchi would be ready for serving and/or packaging for later use.

Experiment 1: Kimchi With A Modern-Day Twist

Today, as holds true in many cultures, there is not enough time in a day to prepare foods using traditional methods. Our students will attempt to implement a modern-day version of making kimchi (see Figure 1). Although not an authentic, traditional version of creating kimchi, conducting this cooking activity will give a feel for the time and effort that goes into preparing this nutritional food via the fermentation process. (Kimchi comes in many varieties; recipes for creating them are readily accessible in modern-day Korean cookbooks.) Students will closely examine the cabbage before and after fermentation has taken place. To get started, you will need:

* 1 Chinese (Napa) cabbage - approximately 3 ½ pounds
* 1 cup of sea salt
* 10 cups of water
* 1 peeled and sliced fresh ginger root
* 1 peeled and slivered medium yellow or red onion
* ¾ cup of gochujang (Korean pepper paste)
* 1 medium daikon radish, peeled and slivered into very thin strips
* 2 large mixing bowls
* 1 large airtight container to accommodate the ingredients (e.g., quart-size Mason jar)

Kimchi – An "Easy" Version for Modern Times

These ingredients, in line with Steps 1 - 6 that follow, are used to make kimchi.

After the stuffed cabbage creation has undergone the 3-day fermentation process, it is ready for up-close examination. Using cooking shears or a sharp knife, horizontally cut the kimchi halves into bite-size strips. As long as you have meticulously followed the preparation instructions, the kimchi is ready to enjoy (see "Safety First" paragraph below). Refrigerate leftovers in a sealed container, like a one-quart Mason jar. Note: Unused kimchi can be refrigerated for up to one week.

Figure 1

Safety First: This activity requires that students observe, smell, and taste kimchi. For health safety reasons, do not allow students to taste the classroom-created version. Opt to have students sample kimchi purchased from a Korean restaurant or market. Be sure to obtain get written permission from parents for their child to taste authentic kimchi. Also, have loads of water on hand, as it may prove quite spicy for some children.

Step 1. Thoroughly wash and dry all vegetable ingredients before using. Remove outer cabbage leaf layers from the head. Distribute one leaf to each team so that each member can closely observe the leaf with their magnifying glass. Have students draw a detailed picture of their leaf on the Kimchi Observation Worksheet (see Attachment A, Point 1). Subsequently remove 2 additional cabbage leaves. Dice them so each student can sample this vegetable in its natural state. Have students correspondingly record their descriptive observations in their Science Journal.

Step 2. Cut the remaining cabbage lengthwise into halves. Combine salt and water in a large container and stir until the salt is dissolved. Soak cabbage halves in salt water solution for 6-8 hours, keeping the leaves completely submerged. (A clean saucer can be placed atop the submerged ingredients to achieve this end.)

Step 3. Remove the cabbage from the salt water solution. Rinse and squeeze out any excess water. Remove three leaves. Halve them and distribute one to each team for observation. Have students record findings (see Attachment A, Point 2).

Step 4. In a separate bowl, combine and toss the shredded daikon radish, slivered onion, and Korean pepper paste until they are thoroughly combined. Set these combined ingredients aside for 10 minutes. (This constitutes the kimchi filling.)

Step 5. Using your fingers, separate the cabbage leaves. Spoon a tablespoon of the filling between each leaf. Rub the leaves with the filling mixture, ensuring all leaves are well coated on both sides. Place the stuffed cabbage in an airtight container. Cover and set in a cool place for 2 to 3 days, during which time the kimchi will undergo additional fermentation. After the kimchi has set and matured, the fermentation process is complete.

Step 6. Remove kimchi. Using clean cooking shears, cut kimchi into bite-size portions. Distribute samples for observation purposes. Retain leftover kimchi in a Mason jar and refrigerate.

An Awesome Discovery!

Have your students closely examine their kimchi creation and record their findings (see Attachment A, Point 3). Students will observe that the sauce-covered cabbage has a beigest white color with a spicy, firm, and crunchy texture. (Because we followed the directions to the letter, I opted to sample our kimchi creation. Mmm! Not bad! For food health safety reasons, I did not allow my students to sample it. That is because if for any reason the kimchi is not placed in an air-tight container, as emphasized in Steps 2 and 5, harmful microbes can make the kimchi go bad, rendering it unsafe for consumption. Additionally, for test purposes, we retained our kimchi version post the recommended refrigeration period: after 10 additional days, we found the cabbage ingredients turned a slimy, dingy green, and the odor was much stronger than before. The kimchi had gone bad! Because of these factors, it is important that students visually experience the classroom-made version).

Trying The Real Thing

Alternatively, allow students to sample authentic kimchi purchased from a Korean market or restaurant. When sampling this version, students will immediately notice a distinct difference between its taste versus that of raw Napa cabbage: authentic kimchi has a crunchy texture and a pickled, spicy taste, indicating that fermentation has taken place--not at all like the fibrous, bitter leaf samples taken from the original head of cabbage. Upon sampling authentic kimchi, have students record their opinion regarding its taste in picture form. (Expect some hilarious artwork!) Subsequently have them com-pare and contrast the taste of fresh Napa cabbage and kimchi, recording their comparative observations in written form in their Science Journal (see Attachment A, Point 4.)

Complementary Activity 1: Arrange for your class to experience a traditional meal with kimchi accompaniments at a Korean restaurant. In New Haven, visit the Seoul Restaurant located on Crown Street. Take photos and have students write about the experience!

Complementary Activity 2: Visit a local Korean grocer/gift shop (in New Haven, visit the Hanmi Korean Market off Edwards and State Streets). Browse through Korean artifacts and assorted foods, including their extraordinary fruits, vegetables, and tasty treats like kimbap (rice rolled in dried seaweed, containing strips of meat, vegetables, and/or egg), melon and/or green tea ice-cream! Interview the storeowner, take photos, and have students write about the experience!

Green Tea - More Than A Beverage!

The Hadong and Boseong, located in the southwestern and southeastern regions of South Korea are two of several one areas known for cultivating green tea. (In Hadong, annual green tea festivals are held during May and June. Both Hadong and Boseong are tourist landmarks.) Painstakingly harvested by predominantly female Korean workers, the tea is enjoyed by Koreans and countless numbers of people throughout the world. Hot cups of unsweetened green tea warm the soul, and Koreans know just how to extract the delicate, mildly pungent flavor from the leaves.

More than a delicious beverage, green tea contains powerful Vitamin C and antioxidants known as polyphenols. These polyphenols give green tea its flavor and color. The National Institute of Health/National Center for Complementary and Alternative Medicine notes that "because of its polyphenol content, green tea is used to inhibit the growth of cancer cells without harming healthy tissue, to lower cholesterol levels, and to fight against the abnormal formation of blood clots. Green tea additionally has been found to have a calming

effect on the human nervous system." (NCCAM; 2008)

Producing the perfect cup of green tea is a tricky process. The perfect cup has a mild taste, subtle flavor. If not done properly, those helpful polyphenols that provide health benefits can ruin the flavor, making the tea taste too strong and somewhat bitter. Thus, it is important not to overbrew it.

Experiment 2: The Perfect Cup of Green Tea

Which water temperature is best suited for the creation of green tea? How much time is needed to create this delicious beverage? Students will test to find the answers to these questions in the two trial experiments below.

Trial 1 - Best Water Temperature

You will need:

* 1 teaspoon of loose green tea within tea strainer or one green tea teabag per teacup
* 3 transparent teacups
* refrigerated water/tap water/boiled water
* 24 - 25 plastic teaspoons
* timer

Step 1. Set up teacups with tea-filled strainer or tea within each.

Step 2. Fill each cup equally with iced, cold, and boiling water respectively.

Step 3. Set timer for 10 minutes; let each beverage-filled cup set for that duration.

Step 4. After 10 minutes have passed, remove teabags or tea-filled strainer. Subsequently provide each child with a plastic spoon to taste tea. After sampling the beverage from each cup, have children tally and graph their results and record their observations (see Attachment B).

Trial 2 - Steeping Duration

You will need

* a tea kettle
* 1 teaspoon of loose green tea within tea strainer or one green tea teabag per teacup
* 4 tea cups
* 24 - 25 teaspoons
* 4 timers, set at 1, 5, 10, 15 minutes respectively

While conducting this cooking activity, inform students that conduction and convection occur when boiling water in the tea kettle: first, the tea kettle becomes heated. Heat conducts along the tea kettle. The cool water within the within the kettle is heated. The cool water rises as water vapor to the top of the kettle. The cool water in the bottom of the tea kettle is replaced by warmer water. This is called convection. The cycle continues until the entire water-filled kettle reaches the same uniform temperature--212F--the perfect temperature to steep green tea. It is at the boiling point that the water should be immediately poured into the tea-filled cup.

Step 1. Fill tea kettle with tap or spring water.

Step 2. Bring water to a boil.

Step 3. Place teabag or tea-filled strainer in the first tea cup. Fill cup with boiling hot water. Allow tea to steep for up to 1 minute. Taste and record flavor rating.

Step 4. Repeat Step 3, this time allowing tea to steep for 5 minutes. Remove the teabag or strainer. Taste and record flavor rating.

Step 6. Repeat Step 3, this time allowing tea to steep for 10 minutes. Remove the bag or strainer. Taste and record flavor rating.

Step 7. Repeat Step 3, this time allowing tea to steep for up to 15 minutes. Remove the bag or strainer. Taste and record flavor rating.

Children will each be given a plastic spoon to sample tea. After tasting, have children record their results (see Attachments C). After tea tasting has been completed, have students tally their findings and subsequently graph their overall results.

Experiment 3: Rice: Long or Short Grains --Which Is Best?

Rice is a food staple that originated in Asia. It grows well in tropical and semitropical climates. Today, it is consumed by at least half of the world's population.

It is estimated that there are 100,000 different varieties throughout the world. Long grain rice--the most popular rice used in the United States--contains amylose, a starchy carbohydrate. Its elongated grains are 4 to 5 times longer than their width. Because of its amylose content, long grain rice often requires large proportions of water to cups of rice when boiling; its grains tend to easily separate after cooking. Short grain rice is one of many varieties used throughout Korea and other Asian countries. It contains a starchy component called amylopectin that easily breaks down in water. Unlike long-grain rice, short-grain rice is slightly longer in length than in width and requires less water when cooking. Its grains tend to stick together and can be easily eaten with chopsticks. Because of its amylopectin content, short grain rice takes a shorter amount of time to cook.

Rice is often cooked using non-standard measurements of rice to water. Whether using long or short grain rice, how do water and heat impact their grains? The cooking activity that follows reveals the answer.

You will need:

* 2 individual cups, each filled with 1 cup of long-grain rice
* 2 individual cups, each filled with 1 cup of short-grain rice
* 2 cups, each filled with 1 ½ cups of water
* 2 cups, each filled with 1 ¾ cups of water
* 4 quart-sized bowls
* a timer
* 24-25 magnifying glasses
* a pot strainer
* 4 stainless steel pots with tight lids

Before beginning the cooking process, have students use magnifying glasses to examine and compare the long grain and short grain rice samples; also remove 5 rice grains from each pot after performing Steps 4 and 6. Have students descriptively draw and record their observations in their Science Journals.

Step 1. Rinse rice in individual bowls. Discard water when it becomes cloudy.

Step 2. Pour 1 ½ cups of water into 2 individual pots; pour 1 ¾

cups of water into the two remaining pots.

Step 3. Add one cup of long grain rice in each pot filled with 1 ½ and

1 ¾ cups of water. Add one cup of short grain rice in each pot filled

with 1 ½ and 1 ¾ cups of water. Keep all four rice pots

uncovered. Set pots over medium heat until rice comes to a boil.

Step 4. After rice comes to a boil, turn heat down to medium-low. Let it simmer

for about 10-15 minutes. Check pots. Stir and add small amount of water if

grains appear dry.

Step 5. Cover each pot. Let set over medium-low heat for 5 minutes.

Step 6. Lift lid and check grains for small, crater-like pockets. (Add small

amount of water to rice pot if grains appear coarse and dry.) Gently toss grains

with fork. Turn heat down to low, and recover each pot. Simmer for approximately

15 minutes until done.

While conducting this cooking activity, the students will discover answers to the following questions (create a separate Q & A form containing these questions so the children can respond to them in their Science Journal):

What are the generic differences between long and short grain rice? Long grain rice has a thicker coating than short grain rice. When cooking both forms of rice using the equal amounts of water, the shorter grain rice tends to absorbs water faster than long grain rice. It also softens quicker.

Why does rice seem to cook faster when the pot is covered with a lid? Convection, as held true when we boiled water for green tea, occurs within the pot. Additionally and most important, the lid covering the pot helps keep the heat from escaping. The gaseous water (steam) gives off a large amount of heat energy when it condenses onto an object, in this instance the rice. The circulating heat process within the covered pot causes the food to reach the boiling point. Thus, the rice cooks faster.

Why might water need to be added to the long-grain rice during the boiling process?

Because of its starchy outer layer and overall amylose content, the long-grain rice did not immediately absorb the water. The water cooked out of the pot before the long grain rice began to soften. More water had to be added to cook the rice thoroughly.

What step can be added to help the rice better absorb water during the cooking process? Some cooks soak rice for 15 minutes to as much as 3 hours to soften its outer layer. Doing so helps to quicken the cooking process. Still others add more water as deemed necessary during the cooking process. Doing so--particularly for long grain rice allows it to soften in texture.

Can long grain rice be used in Korean cooking? Explain. The response here may vary. Some will discover that although the texture differs slightly, adding water and allowing the long-grain rice to cook for a longer duration softens the rice, making it suitable for a Korean meal. (Students may also find that the long grain rice becomes firm again once it is cooled for a long duration. The short grain rice remains sticky.) In general, short-grain rice proves the quicker, easier rice to use for this purpose.

Conclusion

We have discovered much about Korean culture. Through restaurant visits and in-class kitchen creations, we have sampled authentic and student-created kimchi, rice, and tea. When it comes to a taste of Korea, we know it's more than just cooking! Use this curriculum unit as a framework to explore the history, cultures, and foods of other cultures. Most of all, have fun learning about and embracing our global community!

My name is _____ Date_____.

KIMCHI OBSERVATION FORM

Draw a picture of each cabbage leaf specimen in the spaces below.

1	2
3	4

1 Date Observed: _____ Using a magnifying glass, look closely at the cabbage leaf. Draw your observations in Box 1 above. What did you notice about the cabbage leaf? Describe its physical characteristics, its smell, and its and taste. Record your observations in your Science Journal.

2 Date Observed: _____ Using a magnifying glass, look closely at the cabbage leaf that was removed from the saline liquid? Draw your observations in Box 2 above. Smell the cabbage leaf. What do you notice about its physical characteristics and its smell? Record your observations in your Science Journal.

3 Date Observed: _____ Using a magnifying glass, look closely at the sauce-coated cabbage leaf? What do you notice about its physical characteristics and its smell? Record your observations in your Science Journal? Draw your observation in Box 3 above.

4 Taste a sample of store-bought kimchi. How does its taste compare to that of the cabbage you originally tasted in its natural state? Write your taste observations in your Science Journal. Draw a picture of yourself tasting the store-bought kimchi! Include a facial expression that shows how you liked it!

Attachment A

My name is _____ Date_____.

"BEST WATER TEMPERATURE" OBSERVATION FORM

1 Room TemperatureWater	2 Refrigerated Water	3 Boiled Water
		
_____	_____	_____

Strong Tea Taste *Mild Tea Taste* *Watery Taste* *Most Color Change* *Slight Color Change* *Colorless*

Look at the bolded word list and picture boxes below. After conducting this experiment, fill in the best word(s) to describe each tea-temperature sample pictured below. Also, record your findings as directed in each step below.

Step1. What did you notice about the characteristics of the room-temperature water when you first poured it into the tea-filled teacup? What did you notice about the water in the teacup after 10 minutes passed? Taste the tea in the first teacup. How does it taste? Write your detailed observations for Step 1 in your Science Journal.

Step 2. What did you notice about the characteristics of the refrigerated water when you first poured it into the tea-filled teacup? What did you notice about the water in the cup after 10 minutes passed? Taste the tea in the second teacup. Write your detailed observations for Step 2 in your Science Journal.

Step 3. What did you notice about the characteristics of the boiling water when you first poured into the tea-filled teacup? What did you notice about the water in the cup after 10 minutes passed? Taste the tea in the third teacup. Write your detailed observations for Step 3 in your Science Journal.

Step 4. Based on your observations, which water temperature is best to create the perfect cup of green tea?

Attachment B

My name is _____ Date_____.

"STEEPING DURATION" OBSERVATION FORM

 *Teacup 1- 1 Minute* Taste Rating _____	 *Teacup 2 – 5 Minutes* Taste Rating _____	 *Teacup 3 – 10 Minutes* Taste Rating _____	 *Teacup 4- 15 Minutes* Taste Rating _____

Flavor Rating Scale

1 = weak	2 = mild and flavorful	3 = slightly bitter	4 = very strong

Teacup 1 - Taste a spoonful of steeped tea from the first cup. Then, look at the rating scale above. Include your numeric rating beneath Teacup 1. Describe the tea's flavor, smell, and appearance. Write your description for Teacup 1 in your Science Journal.

Teacup 2 - Taste a spoonful of steeped tea from the second cup. Then, look at the rating scale above. Include your numeric rating beneath Teacup 2. Describe the tea's flavor, smell, and appearance. Write your description for Teacup 2 in your Science Journal.

Teacup 3 - Taste a spoonful of steeped tea from the second cup. Then, look at the rating scale above. Include your numeric rating beneath Teacup 3. Describe the tea's flavor, smell, and appearance. Write your description for Teacup 3 in your Science Journal.

Teacup 4 - Taste a spoonful of steeped tea from the second cup. Then, look at the rating scale above. Include your numeric rating beneath Teacup 4. Describe the tea's flavor, smell, and appearance. Write your description for Teacup 4 in your Science Journal.

Conclusion - Based on your "taste test," which duration is needed to get the best-flavored cup of green tea?

Attachment C

What WE Want To Know About Korea!

Student Name: _____

Geography	Education	Customs & Mores	Religion	Languages
Where is Korea located? What types of land characteristics exist there (peninsula, island, desert, rain forests, rice terraces, farmland…)? What are its natural boundaries (i.e, rivers, oceans, land, mountain ranges…? What are the country's major rivers? Mountains? Other features?	What is school like for children in Korea? Do children wear uniforms? How long is their school day? Are schools as modern as they are in the United States? Do all children go to school? If not, why not? What types of books do children read?	What holidays are celebrated Korea? Why and how are they celebrated? Do people practice special rules when eating? When meeting and greeting one another? When adults and young people interact? Are traditional ceremonies and performed in Korea? Are traditional holidays celebrated? Why? How do people dress when they perform these special occasions? Does dress differ across cultures?	What are the major religions practiced in the Korea? Does everyone practice same religion? If not, how many people practice the types of religions that exist there? Which religion is most widely practiced? What types of buildings/places do people worship in?	What is/are the official language (s) of Korea? Are any other languages or dialects spoken in Korea? How many, and what are they? In which part of Korea are these languages spoken? How do you say "Hello, thank you, and other words in Hangul? In other Korean languages, if applicable? (Give examples.) How do you count from one to 10 in any of the Hangul and/or other Korean languages?

Music	Landmarks	Popular Life	Government	History Past & Present
What type of music is played in Korea (modern, traditional, folk…)? Does music differ from region to region? Who are some of the most popular Korean musicians? Singers? What does the music sound like (find music samples). What traditional musical instruments are played in Korea? What types of music do young people listen to today?	What are the most popular scenic places in Korea? What special landmarks or tourist spots are in Korea (theaters, museums, historic sites, beaches, geographic landmarks like volcanoes or atolls)?	What sports are most popular in Korea? How are the sports played? Who are sports champions in Korea? What type of entertainment exists in the country? Who are Korea's popular actors, singers, entertainers? What types of games do children play? How are the games played? What other popular activities are young people involved in? Who are some of their pop stars?	Why is Korea divided into North and South? What types of leaders does Korea have (presidents, kings, monarchs…)? What type of rule does it have (democratic, communist, parliamentary…)? Who are the leaders today? How did the people feel about them? Does the country have one or more national anthems? What are its words, and what does the anthem symbolize	Who were the original inhabitants of Korea? Did explorers or other countries conquer and influence Korea? Did the U.S. have relationship with this country long ago? Today? Why? How? How many flags does the country have? National anthems? What are the characteristics of the country's flag(s) and what do their colors and symbols represent? When was/were the flag(s) created, and who created it/them? Did war(s) take place in Korea? Why did they happen?
Foods	Wildlife	People & Community	Population/Economics	Some Helpful Resources
What is/are some of the country's traditional dish(es), and what are the ingredients used to make it? What other types of foods are eaten in Korea? How are they made? What fruits, meats, and vegetables are grown/raised here? How do they look and taste?	What types of animals are indigenous to Korea? Are they abundant or endangered? In what part(s) of the country are these animals found, and what are their characteristics? Are they helpful or harmful to the environment? Are any of these animals considered sacred or special to Koreans? Why?	Do diverse groups of people (including immigrants) live in Korea? In which parts of the country do they live? What are the different ethnic groups that make up the population? What types of communities/housing exist in there? What are communities, neighborhoods, and homes like? How do people travel in that country?—what are the modes of transportation in Korea?	How many people live in Korea? How do most make their living? How money much do most people make? What type of money (currency) do they have? What types of jobs and industries exist in Korea? What is the major export product?	*_K Is For Korea_ by Hyechong Cheung. Pictorial intro into Korean culture. *_Land of the Morning Calm: Korean Culture Then and Now._ Pictorially introduces young learners to Korean culture ranging from the Korean alphabet (Hangŭl) to Taekwondo! *http://www.lifeinkorea.com/cgi-bin/pictures.cfm. Provides a wealth of visual images reflective of Korean culture. *http://www.asianinfo.org/asianinfo/korea/about_korea.htm Provides insightful info, including breathtaking photo images, recipes, popular culture, and more.

Attachment D

NEW HAVEN PUBLIC SCHOOL DISTRICT CURRICULUM ALIGNMENT

A Taste of Korea: A Social Studies - Science Adventure aligns with the following New Haven School District and State of Connecticut mandated curriculum requirements:

Social Studies Content Areas 2, 8, and 9: Students will classify and analyze the significance of physical and cultural characteristics of places and world regions; explain how human and natural processes shape places; observe and identify geographic landmarks/boundaries; demonstrate a familiarity with people, places, and events from a spectrum of human experiences through select studies; describe ways in which relationships with other countries affect their lives, our communities, and country.

Science Content Area 3. Students will examine, compare, and contrast how heating and cooling cause change in some properties of specified materials.

Language Arts Content Area Standards 1, 2, 3, and 4. Students will listen to, read, and respond to text about and from other cultures and time periods; compare, contrast, and respond to text about multicultural experiences; recognize values, ethics and beliefs included in a text; discuss topics and connections that cross cultures; prepare, publish and/or present work appropriate to audience, purpose and task; use oral and written responses to convey understanding; demonstrate proficient use of proper mechanics, usage, and spelling skills.

TEACHER RESOURCES

Ang, Catharina Y.W., Liu, Keshun, and Huang, Yao-Wen. Asian Food: Science and Technology, CRC, April 1999. Examines culinary and scientific aspects of cooking across Asian culture including Korea, China, Japan, Indonesia, and more.

Ahn,Yung. A Handbook of Korea, Seoul, Korea, 2000. Created in Korea, this book serves as an insightful resource to Korean culture.

Barham, Peter. The Science of Cooking. Springer, June 2001. Focuses on the physics and food chemistry of everyday cooking. Good resource offering a new look at an area often taken for granted--cooking as Math and Science.

Koo, H. John, and Nahm, Andrew C. An Introduction to Korean Culture, Hollym Press, Korea, 1997. Examines Korean history/culture through an introductory lens.

Marden, Patricia C., Barchers, Suzanne I. Cooking Up World History: Multicultural Recipes and Resources. Greenwood Publishing, Westport, CT, February 1994. Provides some easy-to-make recipes and historical aspects of cultures from throughout the world.

Chung, Soon Young. Korean Cooking Made Easy: Simple Meals in Minutes. Periplus Books, Hong Kong, 2007. An extremely using Korean cooking resource!

Petrello, Valerie. A Kid's Culture Guide to Asian-American History: More Than 70 Activities. Chicago Review Press, May 2007. Accentuates diversity within Asian culture. Provides brief background info, craft and/or cooking activities indigenous to China, Japan,

Korea, the Philippines, India, and other Southeast Asian countries.

STUDENT RESOUCES

Amico, Joan D. and Drummond, Karen Eich. Science Chef. Wiley & Sons, Inc., Canada, 1995. Contains recipes and scientific explanations ranging from How do sauces thicken? to Why do whipped eggs become fluffy when beaten?

Bae, Hyun-Joo. New Clothes for New Year's. Kane-Miller Publishing, China, March 2007. Illustrations take young readers through a step-by-step view of a young girl dressing up for the traditional New Year celebration. .

Cheung, Hyechong. K Is For Korea. Francis Lincoln Children's Books, China, November 2008. Engaging photos help introduces young readers to Korean culture ranging from Arirang folksongs to Zing gongs played during Korean festivals!

Choi, Yangsook. The Name Jar. Alfred A. Knopf, New York, 2001. A simplistic tale that helps young readers grasp that being different and new to a country can spark friendship and cultural understanding.

_____. Peach Heaven. Douglas & McIntire Publishing Group, 2005. A beautiful historically folkloric work worth the sharing.

_____. The Sun Girl and The Moon Boy. A Korean Folktale. Knopf Books for Young Readers, New York (1997). A wonderful folktale comparable to Little Red Riding Hood with a por quoi twist.

Cobb, Vikki. Science Experiments You Can Eat - Revised and Updated. Harper Trophy, New York, 1994. Great general resource for at home use; offers easy-to-grasp explanations with regard to the chemistry and physics of cooking.

Sook Nyul Choi. Yunmi and Halmoni's Trip. Houghton Mifflin, 1997. An inter-generational celebration of diversity, heralding the relationship between a Halmoni (Korean grandmother) and her American-born grandchild.

_____. Halmoni and the Picnic. Houghton Mifflin, 1993. A celebration of diversity, with an introduction to a delicious Korean tidbit, kimpbap.

Stickler, John and Han, Soma. Land of the Morning Calm: Korean Culture Then and Now. Shen's Books, July 2003. Introduces young learners to Korean culture; info ranges from the Korean alphabet (Hangŭl) to Taekwondo.

Patz, Nancy and Ross, Susan. Babies Can't Eat Kimchi. Bloomsbury USA Children's Books; 1st edition, New York, December 2006. Portrays a relationship between an older and young sibling defining what babies versus older children and cannot do. Great literary accompaniment when sampling kimchi!

So-Un, Kim. Korean Children's Favorite Stories. Tuttle Publishing Company, Singapore, April 2004. Folkloric collection of children's stories; a must-have item for one's multicultural literary resource collection.

Park, Linda Sue. Bee-bim-bap. Clarion Books, New York, September 12, 2005. Rhymed verses take readers through the steps of making this traditional meat, rice, and vegetable dish. A perfect accompaniment when savoring bibimbap!

National Center for Complementary and Alternative Medicine (NCCAM). Herbs At A Glance: Green Tea, Nov 2008, Retrieved 6/9/09 http://nccam.nih.gov/health/greentea/>

WEBSITE RESOURCES

http://www.lifeinkorea.com/cgi-bin/pictures.cfm. Provides a wealth of (unlabeled) visual images reflective of Korean culture.

http://andychuang.com/thenamejar.html. Interview with Korean children's book author Yongsook Choi; serves as a great springboard for memoir/realistic fiction storywriting.

http://www.asianinfo.org/asianinfo/korea/about_korea.htm. A "general consumer" web-site that provides insightful info, including breathtaking photo images, recipes, and more.

http://www.foodsubs.com/Rice.html#short-grain. Visual display of different rice varieties.

http://nccam.nih.gov/health/greentea/ Informational website in conjunction with the National Center for Complementary and Alternative Medicine

KOREAN ON-LINE FOOD MERCHANTS (Refer to these websites to order special ingredients unavailable in your neighborhood grocer.)

http://www.asiafoods.com http://www.kgrocer.com

http://www.kgrocer.com www.orientalpantry.com

http://www.zestfoodservings.com http://asianwok.com

http://www.komart.com

ASIAN FOOD MARKETS & RESTAURANTS TOURIST SITES

Hanmi Korean Market

1008 State Street (on the corner of Edwards and State)

New Haven, CT 06511

203) 782-2009

Seoul Restaurant

343 Crown Street

New Haven, CT 06515

(203) 497-9634