

Kitchen Lesson K6-7

Silk Road

Indian Vegetable Curry

Communication

Students discuss their preferences around spicy food and negotiate seasoning for curry as a group.

Academics

This lesson fulfills History-Social Science Content Standards for early civilizations of China; significance of the trans-Eurasian “silk roads” in the period of the Han Dynasty and Roman Empire; Common Core State Standards for integrating information; following a multistep procedure; integrating information presented indifferent; integrating quantitative or technical information; collaborative discussion; speaking and listening; language; and acquiring words and phrases.



Sustainability

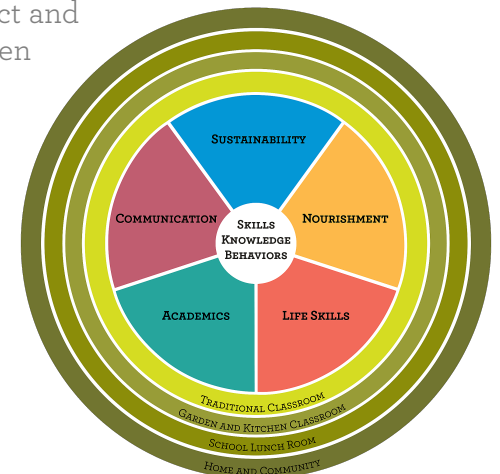
Climate controls which particular crops can be grown in different regions. Pepper, for example, is dependent upon hot weather, while cilantro can grow anywhere.

Nourishment

Students enjoy a vegetable curry prepared with freshly toasted and ground spices served with steamed brown rice.

Life Skills

Students learn how to toast and grind fresh spices to produce more intense flavors, and that cooking spices in fat can help extract and intensify those flavors even more.



The Silk Road: Indian Vegetable Curry

Summary

In this 6th grade humanities lesson, students prepare Vegetable **Curry** as they study the ideas, goods and foods that India shared with other regions along the Silk Road. This is the second of four Silk Road lessons.

Objectives

After this lesson, students will be able to:

- Cite examples of India's contributions to the Silk Road
- Describe the Silk Road
- Identify ingredients and practice tasting the results of the Vegetable **Curry**

Assessments

During this lesson, students will:

- Name ideas, goods, and foods from India that were traded along the Silk Road
- Identify the Silk Road as a network of trade routes and describe the terrains and methods of transportation used by travelers
- Measure, toast, grind and combine spices for the Vegetable **Curry**, and taste and season the dish according to their preferences

Communication is strengthened by discussing preferences around spicy food and negotiating seasoning for curry as a group.

Sustainability is highlighted by understanding that climate affects which particular crops can be grown in different regions.

Nourishment is acquired by eating vegetable curry prepared with freshly toasted and ground spices served with steamed brown rice. **Life Skills** are sharpened as students learn how to toast and grind fresh spices to produce more intense flavors, and that cooking spices in fat can help extract and intensify those flavors even more.

Academics fulfill History-Social Science Content Standards for early civilizations of China; significance of the trans-Eurasian "silk roads" in the period of the Han Dynasty and Roman Empire; Common Core State Standards for integrating information; following a multistep procedure; integrating information presented indifferently; integrating quantitative or technical

information; collaborative discussion; speaking and listening; language; 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; identifying **basic tools**; identifying **ingredients** by name; and making connections between the diets of **historic cultures** and foods we eat today. 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*

History–Social Science Content Standards for California Public Schools, Grade 6

- 6.6 Students analyze the geographic, political, economic, religious, and social structures of the early civilizations of China.
 - 6.6.7 Cite the significance of the trans-Eurasian “silk roads” in the period of the Han Dynasty and Roman Empire and their locations.

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

- 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 1.1.1 through 1.3.12. See *The Edible Schoolyard Berkeley Standards* for details.

In the Kitchen Classroom, 6th grade

- Tools 2.1.1: Identify **basic tools** at the ESY Cooking Station and use and care for them with guidance.
- Techniques 2.2.4: Identify **ingredients** by name, and discuss them using descriptive words in conversation.
- Concepts 2.3.11: Make connections between the diets of **historic cultures** and foods we eat today.

The Silk Road: Indian Vegetable Curry Lesson

Materials

For the Chef Meeting

- K6-7 Visual Aid
- Vegetable **Curry** recipe
- **Curry** Spice Mix recipe
- Traditional Indian Music recording
- Music player
- Ingredients and tools for demonstration

Ingredients

- Basmati rice

For the Curry Spice Mix

- Coriander seeds
- Cardamom pods
- Mustard seeds
- Black peppercorns
- Cumin seeds
- Chili flakes
- Ground turmeric

For the Vegetable Curry

- Olive oil
- Onion
- **Curry** Spice Mix
- Carrots
- Potatoes
- Garbanzo beans

- Coconut milk
- Vegetable stock
- Assorted greens
- Salt
- Pepper

Tools

- Cast iron skillet
- Heavy bottomed pot
- Vegetable peeler
- Mortar and pestle
- Wooden spoon
- Chef knives
- Paring knives
- Cutting boards
- Measuring beaker
- Measuring cups
- Measuring spoons

Equipment

- Stove

Timeline Overview

Total Duration: 90 minutes

1. *Invitation** (5 minutes)
2. *Concept Invention** (15 minutes)
3. *Application** (60 minutes)
4. *Reflection** (10 minutes)

Before You Begin

- Collect all the tools and ingredients and distribute them to the tables
- Gather supplies for the Chef Meeting

- Create the visual aid
- Copy the **Curry** Spice Mix recipe to hand out
- Copy the Vegetable **Curry** recipe to hand out
- Select music and set up audio player
- Prepare the vegetable stock (if possible, use stock made in an earlier class)
- Cook the rice
- Cook the garbanzo beans

Procedures

Welcome

1. *Invitation**: (5 minutes)
 - a. Play music as students silently enter the classroom.

At the Chef Meeting

2. *Concept Invention**: (15 minutes)

Students learn about India and the Silk Road.

- a. Welcome students and review the Steamed Dumplings recipe from the previous lesson, and China's role on the Silk Road.
- b. Tell students that today they will be traveling to the city of Kashgar, which was a central meeting place for the three main regions of the Silk Road: China, India and Rome.
 - i. Use a rainbow chard leaf to illustrate that the Silk Road was not a single road, but many.
 - ii. Show how the veins of the leaf connect to the main stem, in the same way that minor routes of the Silk Road connected to the main route.
- c. Use the visual aid to review the goods, ideas and foods that China traded along the Silk Road.
- d. Ask students to think back to China's silk and what made it so valuable to trade, and then remind them that because of the harsh physical terrain, light and packable items were ideal trading goods.
- e. Ask students to use the visual aid to identify the languages, religion, technology, and music that India contributed to trade along the Silk Road.
- f. Also ask them which goods, ideas, and foods originated in India and traveled along the Silk Road.
- g. Explain that spices contributed not only to trade, but also to culture, as they influenced people's diets.
- h. Identify the city of Kashgar and explain its importance to the Silk Road.

- i. It was the central trading point where Eastern and Western trade routes met, by connecting three major empires of the Ancient world: India, China, and Rome.
- i. Tell students that in Kashgar the terrain became mountainous and travelers could not continue on camels because the mountains were too treacherous, therefore camels were exchanged for Yak.
 - i. This part of the route was so deadly that many humans and animals lost their lives, and it became known as the “Trail of Bones”.
- j. Explain one more reason Kashgar is important:
 - i. The western Silk Road connected Kashgar to the Mediterranean through Persia, by going over the Pamir Mountains, through Mesopotamia, and across the Syrian Desert. Once goods reached the Mediterranean they were taken by ship to Rome.
- k. Introduce **curry**, and explain that people all over the world make **curry**.
 - i. **Curry** is a combination of spices, and the recipe is often changed depending on the region in which it is prepared.
 - ii. Today’s **Curry** Spice Mix is based on a traditional Indian mix of spices that were traded along the Silk Road.
- l. Ask students to wash their hands and join their table group.

At the Table

3. *Application**: (60 minutes)

- a. Meet with the table groups to review the recipe and assign jobs.
 - i. Demonstrate how each ingredient will be prepared.
- b. Prepare the recipe.
- c. Set the table; eat; clean up.

At the Closing Circle

4. *Reflection**: (10 minutes)

- a. Ask Students to name one item that China or India contributed to trade along the Silk Road.

Vocabulary

Curry

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

K6-7_Visual_Aid.pdf

Vegetable_Curry_Recipe.pdf

Curry_Spice_Mix_Recipe.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)

india

AND THE

Silk Road

WHAT INDIA GAVE:

IDEAS

GOODS

FOODS



INDIAN BUDDHA



CHINESE BUDDHA



COTTON



IVORY



PEARLS



MANGO



CORIANDER



TURMERIC



CARDAMOM



CUCUMBER



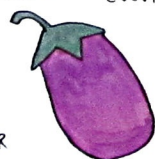
BLACK PEPPER



CUMIN



GINGER



EGGPLANT



KASHGAR

WHERE EAST MEETS WEST

THE WESTERN Silk Road:



connected KASHGAR to ROME and EGYPT

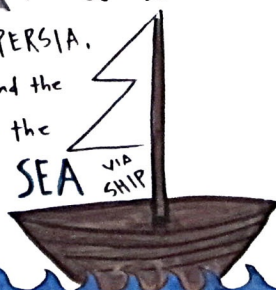
By going over the

PAMIR MOUNTAINS



VIA YAK

through CENTRAL ASIA, PERSIA, MESOPOTAMIA and the SYRIAN DESERT to the MEDITERRANEAN SEA to ROME



VIA SHIP

THE EASTERN Silk Road

connected KASHGAR to LUOYANG (CHINA'S CAPITOL CITY)

through the TAKLIMAKAN DESERT

VIA CAMEL



★ Merchants carts were searched before being allowed OUT of CHINA to prevent ~~SMUGGLING~~ SILKWORM SMUGGLING

Vegetable Curry

2 tablespoons olive oil

1 onion - peeled and diced

2 tablespoons curry spice mix

4 carrots, peeled and sliced

6 potatoes - diced

1 cup cooked garbanzo beans

2 cups (1 can) coconut milk

4 cups vegetable stock

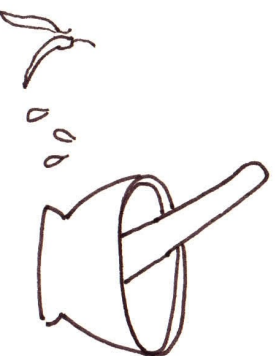
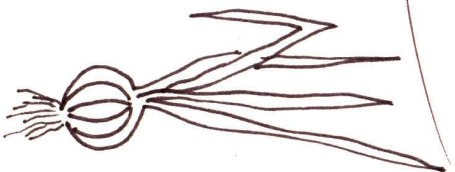
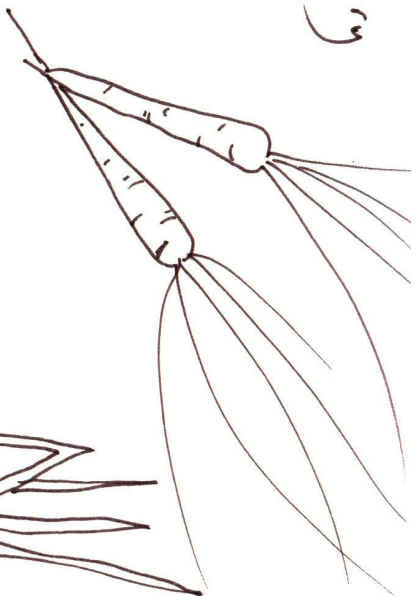
1 bunch greens - washed, destemmed
and chopped

salt and pepper to taste


Heat the olive oil in a large pot and add the diced onions and curry spice mix. Sauté over medium heat for 3-5 minutes, add the carrots, potatoes, garbanzo beans, and coconut milk. Bring to a simmer and add the vegetable stock. Simmer until the potatoes are tender. Add the greens and season with salt and freshly ground pepper. Serve over basmati rice.


Options: • If you like more curry flavor you may add more of the curry spice mix as the curry is simmering.


- Feel free to use other vegetables that are in season. Cauliflower, squash, peas, pumpkin, beets, turnips or parsnips are all wonderful additions.





Curry Spice Mix


2 tablespoons coriander seeds 


8 cardamom pods 

2 tablespoons mustard seeds 

1/2 teaspoon black peppercorns 

2 tablespoons cumin seeds 

1 teaspoon chili flakes 

2 tablespoons ground turmeric 

In a medium hot skillet (dry - no oil) toast the coriander, cardamom, mustard seeds, peppercorns and cumin till fragrant - about 1 minute. Combine the toasted spices in a mortar and pestle, add the chili flakes and turmeric and grind to a powder. Makes approximately 1/2 cup.

