

FARM TO PRESCHOOL HARVEST OF THE MONTH ACTIVITY PACKET

Collard Greens and Bok Choy



February 2011 Read Aloud Books and Activities

Week 1 Theme: What's the Cabbage Family?

Week 2 Theme: Growing Greens from Seed

Week 3 Theme: Black History Month

Week 4 Theme: Chinese Lunar Year



HARVEST OF THE MONTH ACTIVITIES

Cabbage Family: Collards and Bok Choy Week 1

What's the Cabbage Family?

Objectives:

- Students will learn which vegetables are in the "cruciferous" family.
- Students will learn why "greens" are healthy to eat.
- Students will identify green fruits and vegetables.

Materials:

Fresh Fruit and Vegetable Photo cards
Rainbow of Fruit Chart

Directions:

1. Discuss with the class that "cruciferous" (crew-sif-er-ous) vegetables are ones that are in the "cabbage" or "mustard" family of plants. These vegetables include bok choy, broccoli, Brussels sprouts, cabbage, collard greens, kale, kohlrabi, mustard greens, Swiss chard and turnip greens. Show the class a Fresh Fruit and Vegetable Photo Card for each of these vegetables as you name them.
2. Ask the class if anyone has eaten a vegetable from the cabbage family before. How did they eat it? Talk about the different ways we can eat these cruciferous vegetables, for example, chopped up into a salad like cole slaw or cooked in a stir fry or soup.
3. Talk about the color of the cabbage family. Most are different shades of green. Many are leafy. Many people refer to them as eating "greens". Green vegetables are good for your eyesight and for building strong teeth and bones. Bok choy and collards are our "Harvest of the Month" vegetables; they have Vitamin A which keeps your hair and skin healthy. Add bok choy and collards to the green column of the Rainbow of Fruit Chart that was started in October.
4. Remind the class that eating lots of fruits and vegetables makes us healthy and strong because they have lots of vitamins that we need to grow. Ask the students to identify other fruits and vegetables that are green that will help them stay strong and be healthy. Examples could be: avocado, celery, cucumber, grapes, peppers, honeydew melon, kiwi, leaf lettuce, pears, peas, and zucchini. As they identify them, ask them if it is a fruit or a vegetable. Show a Fresh Fruit and Vegetable Photo Card for each one, if available.

HARVEST OF THE MONTH ACTIVITIES

Cabbage Family: Collards and Bok Choy Week 2

Growing Greens from Seed

Objectives:

- Students will learn the seasons cruciferous vegetables grow.
- Students will understand that vegetables are most nutritious when freshly harvested.
- Students will know that plants grow from seeds.
- Students will plant bok choy and collards seeds and record how they grow.

Materials:

Fresh Fruit and Vegetable cards

Growing Activity: Bok Choy and Collards Seeds

Paper or Plastic containers

Soil

"Growing Greens" Seed Growing Chart

Directions:

1. Discuss that plants in the cabbage family are called "cool weather" plants. Though we have warm weather in Southern California and farmers grow vegetables all year, they are most commonly grown and eaten in fall, winter and early spring. Ask the class, "What season are we in now?".
2. Ask the students if they have ever grown a plant from a seed.
3. Explain that they will grow bok choy and collards as a class and will observe and compare how the plants grow.
4. Explain to the students that fresh vegetables are the most nutritious when harvested fresh from the garden. Another place to get fresh vegetables is at the farmers' market.
5. See attached instructions for "How to Grow Greens"

HARVEST OF THE MONTH ACTIVITIES

Cabbage Family: Collards and Bok Choy Week 3

Black History Month

Book: Two Mrs. Gibsons by Toyomi Igus *

Objectives:

- Students will understand that food is an important part of every culture.
- Students will learn that “greens” are an important part of traditional “soul food” in African-American culture.
- Students will identify and draw special foods in their culture and family.

Materials:

Paper and Crayons

Directions:

1. Read the book Two Mrs. Gibsons.
2. Be sure to point out the “greens” being cooked by nanny Mrs. Gibson and the “greens” growing in the garden at end of the book.
3. After reading the book, go back mid-book to the kitchen scenes and ask the Class: “what are they cooking?”.
4. Explain that February is Black History Month, a time when we honor the notable achievements of African Americans. Food is a very important part of every culture. “Greens” are a traditional food in African-American cuisine, known as “soul food” originating from the recipes of the slavery era in the Southern United States (if a map is available, point out this region to the students). Note that nanny Mrs. Gibson is from Tennessee.
5. Ask the students if there are special dishes their families cook with “greens” or green vegetables. You may want to remind them of the cruciferous vegetables they learned about last week.
6. Provide each student with paper and crayons. Ask the class to draw a picture of a special meal their family makes.
7. Write down their description of their drawing and display in the classroom.

* For younger students, you may want to omit sections of the book as it is a longer story. Be sure to include the contrasting kitchen scenes.

HARVEST OF THE MONTH ACTIVITIES

Cabbage Family: Collards and Bok Choy Week 4

Chinese Lunar New Year

Objectives:

- Students will monitor the growth of the class bok choy seedling
- Students will learn about the origin of bok choy
- Students will learn about Chinese Lunar New Year customs
- Students will taste bok choy

Materials:

"Growing Greens" Seed Growing Chart (from Week 2)
Food Experience ingredients

Directions:

1. Ask the class if they have eaten bok choy or collard greens. Then ask if they have ever seen bok choy or collards growing in a garden or at a farm. Record the current growth of both plants "Growing Greens" Seed Growing Chart.
2. Remind the class that food is a very important part of every culture. Last week we learned that collard greens are a traditional food in African-American "soul food". Bok choy is a traditional food in Chinese and other Asian cultures. It has been grown in China since the 5th century and from there it spread throughout the remainder of Asia and then throughout the world. In Korea, bok choy is used to make pickled Kim Chi.
3. February is usually the month of the Chinese Lunar New Year. It is also called the Spring Festival because it celebrates the Earth coming back to life and the beginning of plowing and planting in the farm fields. It is a very important holiday in China, and other countries such as Indonesia, Korea, Philippines, Thailand, Tibet, Vietnam and many "Chinatowns" around the world (if a map is available, point these areas out to the students). It is celebrated with dancing dragons, eating special foods, cleaning and decorating the house and streets with Chinese lanterns, giving gifts, shooting fireworks, and getting ready for the coming year. It's a very colorful and joyous event.

4. Tell the class they are going to celebrate the Chinese Lunar New Year by making a “Bok Choy Cole Slaw” salad and tasting it together as a class.
5. While mixing the ingredients, refer to the handout in your binder **Conducting An In-Class Taste Test** for ideas on how to engage the class. Have students put a sticker on either the “I Like This” or “I Don’t Like This” columns of the taste test sheet, or have them write or initial their name if they are able to do so.

*It may be easier if the ingredients are pre-prepared, but have the students measure and/or mix the ingredients together. If in a large group, divide into smaller groups to encourage more classroom participation.

The Chinese New Year names revolve around a 12-year repeating cycle of animal names. The Chinese New Year is based upon a lunar calendar and the cycles of the moon which is why the date fluctuates every year. It is usually celebrated in late January to early February. Chinese New Year starts on a New Moon and ends with the lantern festival on the full moon 15 days later. In 2011, Chinese New Year is celebrated on February 3. In the Chinese calendar, it is the year 4708, and the Year of the Rabbit.

<p>鼠 </p> <p>Year of the Rat 1972, 1984, 1996, 2008</p> <p>Rat people are very popular. They like to invent things and are good artists.</p>	<p>牛 </p> <p>Year of the Ox 1973, 1985, 1997, 2009</p> <p>People born in this year are dependable and calm. They are good listeners and have very strong ideas.</p>	<p>虎 </p> <p>Year of the Tiger 1974, 1986, 1998, 2010</p> <p>Tiger people are brave. Other people respect tiger people for their deep thoughts and courageous actions.</p>	<p>兔 </p> <p>Year of the Rabbit 1975, 1987, 1999, 2011</p> <p>People born in this year are nice to be around. They like to talk, and many people trust them.</p>
<p>龙 </p> <p>Year of the Dragon 1976, 1988, 2000, 2012</p> <p>Dragon people have good health and lots of energy. They are good friends because they listen carefully to others.</p>	<p>蛇 </p> <p>Year of the Snake 1977, 1989, 2001</p> <p>People born in this year love good books, food, music, and plays. They will have good luck with money.</p>	<p>马 </p> <p>Year of the Horse 1978, 1990, 2002</p> <p>People born in this year are popular, cheerful, and are quick to compliment others. Horse people can work very hard.</p>	<p>羊 </p> <p>Year of the Goat 1979, 1991, 2003</p> <p>People born in this year are very good artists. They ask many questions, like nice things, and are very wise.</p>
<p>猴 </p> <p>Year of the Monkey 1980, 1992, 2004</p> <p>Monkey people are very funny. They can always make people laugh. They are also very good problem solvers.</p>	<p>鸡 </p> <p>Year of the Rooster 1981, 1993, 2005</p> <p>People born in this year are hard workers. They have many talents and think deep thoughts.</p>	<p>狗 </p> <p>Year of the Dog 1982, 1994, 2006</p> <p>Dog people are loyal and can always keep a secret. Sometimes dog people worry too much.</p>	<p>猪 </p> <p>Year of the Pig 1983, 1995, 2007</p> <p>People born in this year are very good students. They are honest and brave. They always finish a project or assignment.</p>

ACTIVITIES TO EXTEND THE LEARNING EXPERIENCE

WEEK 1 (optional)

Tutti Frutti Instant Recess

- Remind students that green vegetables keep our bodies strong.
- Exercising is also important to keep our bodies strong.
- This exercise is meant for students to “show off” their arm muscles and increase their heart rate.
- Studies have shown that Physical Activity breaks increase student concentration and attentiveness.
- When losing some of your students attention, try doing this exercise to help the class re-focus the class.

SPINACH STEPPING

- (1) Tap your right foot in front
- (2) Tap your right foot behind
- (3) Now bend your arms up when you tap your foot forward
- (4) Bend your arms down when you tap your foot backward
- (5) Switch to your left foot and repeat each side 10 times



WEEK 2 (optional)

Set a table aside for a **Bok Choy Discovery Lab:**

- Display a recently harvested bok choy plant.
- Make available scientific tools such as measuring tapes/rulers, a scale, magnifying glasses, and tweezers or chop sticks.
- Make available paper, pencils and crayons for students to draw observations. Teachers can write down the students’ observations on each student’s paper or collectively on one large paper.
- Encourage students to examine the leaves, separate them, arrange them by size, and make a “hypothesis” of why larger leaves are on the outside and smaller leaves are in the center.
- Remind students of the bok choy seeds they just planted and explain that the bok choy they are investigating is what the seed will grow into over time with enough sunlight, water and soil.
- This will help students understand the connection between seed and plant

WEEK 3 (optional)

Garret Morgan , Traffic Light Inventor (1877-1963)

Garret Morgan was an African-American inventor who invented two very different and important things: the gas mask (used by firemen) and the traffic signal. During his long life, he also became one of the most recognized and respected African-Americans in the country. The automobile was a relatively recent invention, and it was by no means the only method of transportation used by Americans. Many people still rode in horse-drawn carriages or rode bicycles or walked in the streets. People driving cars went much faster, of course, and accidents were commonplace. His invention of the traffic signal prevented many accidents. As driving became more popular his mechanical traffic signal was replaced with the electrical traffic still used today to prevent car accidents.

<http://www.socialstudiesforkids.com/articles/ushistory/garrettmorgan.htm>

Play "Red Light, Green Light"

- A student or teacher stands up with her/his back toward the class holding red, yellow and green sheets of paper.
- When he/she holds up the green paper, the class walks fast; the class walks slowly when the yellow paper is held up; and when the red paper is held up, the entire class stops walking.

WEEK 4 (optional)

Wish someone a Happy New Year in:

Cantonese: *Gung Hay Fat Choy!* (May prosperity be with you)

Mandarin: *Xin Nian Kuai Le!* (Happy New Year)

Celebrate the Chinese Lunar New Year with a Fireworks Mural

- You will need plastic dish scrubbers or sponges, large roll of black (Butcher) paper and tempera paints
- Pour small amounts of tempera paints into shallow containers
- Place black paper on a long table along with the paint containers
- Students can dip the scrubbers and/or sponges into the paints and lightly touch the paper to make "firework" prints
- Continue until the black sky is filled with exploding fireworks
- Hang the mural on a wall or bulletin board

http://www.preschoolexpress.com/holiday_station07/chinese_new_year_feb07.shtml

Enhancing the Experience in Your Organic School Garden

February is a great time to start planting:

Beets	Bok Choy	Broccoli*	Cabbage*	Carrots	Cauliflower*	
Celery	Chard	Chives	Collards	Endive	Kale	Kohlrabi
Leek	Lettuce	Mustard	Onions	Parsley	Parsnips	Peas
Radishes	Spinach	Tomato*	Turnips			

* Best to start in flats or individual containers

Modified from the Burpee Planting Guide- California

Food Experience Calendar

Week 4 Bok Choy Cole Slaw

Optional Kohrabi Sticks

Optional Simmered Greens

Optional "Popo's" Bok Choy Stir Fry

FOOD EXPERIENCE RECIPES

Week 2

Bok Choy Cole Slaw

Ingredients:

2 large Bok Choy or 4 baby Bok Choy, chopped

1 cup of shredded carrots

½ cup of sesame seeds

Dressing*: 3 tablespoons oil (sesame oil is best, olive oil okay)

4 tablespoons vinegar (rice is best, cider, white or wine okay)

3 tablespoons Honey (sugar okay)

2 tablespoons Soy Sauce

Optional: 1 can of mandarin oranges

1 cup of raisins

1 cup green copped green onions

1 cup slivered almonds

1/2 (6 ounce) package chow mein noodles

Directions:

1. In a glass jar with a lid, mix together oil, vinegar, honey (sugar), and soy sauce. Close the lid, and shake until well mixed.

2. Combine the bok choy and sesame seed in a salad bowl. Toss with dressing, and serve.

* May also substitute ¾ cup of "Asian-style Dressing"
Makes 20+ taste tests

Optional

Kahlrabi* Sticks

Ingredients:

- 2 Kahlrabi
- 1 lemon (optional)

Directions:

1. Remove Leaves and woody (bottom of) root
2. With a paring knife, cut or peel outer coating to expose white inner flesh
3. Slice like a tomato, and cut each slice into sticks like carrots
4. Eat raw or squeeze some lemon juice on them.

Make about 20 taste tests

*Raw kohlrabi is crisp, sweet, and taste like raw broccoli stalks with the consistency of jicama or a radish. Cooked, it has a mild, nutty, cabbage-like flavor. Kohlrabi translates to "cabbage-turnip" in German.

Optional

Simmered Greens

Ingredients:

- ¼ cup olive oil
- 2 cloves Garlic, minced
- 2 cups Onions, chopped
- 2 cups Green Onion, chopped
- 2 cups low-sodium Vegetable Broth
- 2 cups Tomato juice
- 2 pounds Greens (mixture of kale, mustard, collard, swiss chard, turnip greens).
- Salt and Pepper to taste

Directions:

1. In large pot, sauté garlic and onions in oil.
2. Add broth and tomato juice. Bring to a boil.
3. Add greens and season.
4. Cover and cook over low heat for 35 minutes or until tender.
5. Serve warm for tasting.

Makes 30+ taste tests (¼ cup each)

Recipe Adapted From: Harvest of the Month Educator Newsletter (Cooked Greens)

Optional

Popo's Bok Choy Stir Fry ("Popo" means Grandma in Mandarin)

Ingredients:

- 1-2 lbs Bok Choy
- 1 1/2 tablespoons of Peanut, Sesame, Canola or Vegetable oil
- 1-2 cloves of Garlic, finely minced
- 1 teaspoon of fresh Ginger, grated (optional)
- 1/4 to 1/2 teaspoon of Salt (or substitute with 1 tablespoon of Oyster sauce)
- 1 cup low-sodium Vegetable Broth or water

Directions:

1. If the bok choy is small, use it whole. If it is large cut length wise or into smaller bite size pieces.
2. Heat Oil, sauté garlic and ginger for 1 minute .
3. Add bok choy (if the bok choy is cut, add the stalks first), salt and cook for 2 minutes.
3. Remove from pan/wok and serve with rice.

Make about 20 taste tests

