

# **FARM TO PRESCHOOL HARVEST OF THE MONTH ACTIVITY PACKET**

## **Pumpkins and Winter Squash**



### **November 2010 Read Aloud Books and Activities**

**Week 1 Theme: Discovering Pumpkins and Winter Squash**

**Week 2 Theme: From Seed to Pie**

**Week 3 Theme: Winter Squash Inside & Out**



Materials provided by the Center for Food & Justice- UEPI Occidental College  
Materials modified by permission from the Network for a Healthy California-Merced County Office of Education

# HARVEST OF THE MONTH ACTIVITIES

## Pumpkins and Winter Squash Week 1

### Discovering Pumpkins and Winter Squash

#### **Objectives:**

- Students will compare and contrast pumpkins and winter squashes
- Students will estimate and measure pumpkin and winter squashes to determine the size and weight of each
- Students will investigate and compare the outside vs. inside of pumpkins and winter squashes
- Students will estimate which has the most the seeds

#### **Materials:**

1 pumpkin

1, 2 or all: Acorn Squash, Spaghetti Squash, Butternut Squash

String

Balance or Scale

Ruler

Paper cups

Fresh Fruit and Vegetable Photo Cards

Large paper or chalkboard to write down observations (column for each squash)

#### **Directions:**

1. Wash the pumpkins and winter squashes.
2. Show the students the Photo cards (Pumpkin, Winter Squash [clockwise from top is spaghetti, butternut, and acorn squashes], and Winter Squash Varieties) and compare them to the real ones in the classroom.
3. Ask the class to use their senses (eyes, ears, nose, mouth, hands) to describe the *outside* of the pumpkin and squashes. Chart their answers.
4. Have the students estimate which one weighs the most. Weigh each one to determine the heaviest and lightest.
5. Have the students estimate which squash or pumpkin is the fattest (widest). Using the string have the children measure the circumference of each.
6. Chart the information learned from the weighing and measuring.

7. Ask "what do you think is inside each of these squashes?" They may or may not say "seeds."
8. Cut open the top to reveal the seeds. Ask them to estimate how many seeds are in each (or how many cups the seeds will fill).
9. Scoop out the seeds and have the children compare each pile of seeds. Chart their comparisons.
10. Be sure to point out where the "meat" of the pumpkin is - the part we eat.
11. Direct students to separate the seeds from the pulp. Ask the class to use their senses (eyes, ears, nose, mouth, hands) to describe the *inside* of the pumpkin and squashes.
12. Fill cups with seeds. Compare which squash has the most and least seeds. (Optional) Count the seeds to see who's guess was the closest.
13. Have the children come to conclusions by comparing and contrasting their pumpkin and winter squashes observations. Display the chart in the classroom.
14. Save the seeds *separately* for other activities in the month such as in Week 3 (wash and then dry them on a sheet of newspaper).

# HARVEST OF THE MONTH ACTIVITIES

## Pumpkins and Winter Squash Week 2

### From Seed to Pie

**Book:** Pumpkin Circle by George Levenson

#### **Objectives:**

- Students will be able to describe the life cycle of a pumpkin
- Students will be able to identify that pumpkins grow on a vine
- Students will learn the concept "from seed to table"

#### **Materials:**

Ingredients for Food Experience - Pumpkin Dip/ Mini Pumpkin Pies

#### **Directions:**

1. Read Pumpkin Circle. Discuss with students how pumpkins grow from a seed. Show some dried pumpkin seeds from the previous week.
2. Encourage the students to describe the stages of a pumpkin: growing from seed to vine, to flower, to small green pumpkin, and to large orange pumpkin.
3. Ask the class, "In the book what did they do with the pumpkin after they picked it?" (Made a Jack-o-lantern)
4. Explain that a pumpkin is a vegetable that people eat. Ask the students to name different foods made from pumpkins (e.g. pumpkin pie, pumpkin bread, pumpkin seeds, etc.). Yellow and orange vegetables like pumpkins and squashes are good for our eyes and keep our bodies healthy (strengthen the immune system).
5. Ask if anyone has ever gone to a pumpkin patch or a farm that grows pumpkins. Tell the class that this month farmers' markets will have lots of different kinds of pumpkins and other squashes that you won't see in a store. Ask your family to visit the farmers' market this month!
5. As a class make "Mini Pumpkin Pies"(Pumpkin Dip-Food Experience Week 2) Refer to **How to Conduct a Taste Test** for other ideas on how to interact with the students. Have students put a sticker on either the "I Like This" or "I Don't Like This" columns of the taste test sheet.

# HARVEST OF THE MONTH ACTIVITIES

## Pumpkins and Winter Squash Week 3

### Winter Squash Inside & Out

#### **Objectives:**

- Students will be able to describe the inside and outside of winter squashes
- Students will draw a winter squash
- Students will match the dried seeds to their winter squash

#### **Materials:**

Fresh Fruit and Vegetable Photo Cards

Construction paper (colors of squashes and pumpkin used Week 1)

Yellow string or yarn

Dried squash seeds from Week 1

#### **Directions:**

1. Show the students the pictures of the squashes.
2. Review which winter squashes the class explored and what they looked like inside and out (can use Photo Cards). Ask the students to describe what the inside and outside of the squash was like. Note the color and texture (slimy, rough, bumpy, smooth, gooey, etc.). Refer to class chart from Week 1.
3. Show the students the dried seeds from the different squashes.
4. Tell the students that they are going to get to draw a winter squash of their choice.
5. Using pencils do a direct drawing of winter squash on colored paper. Have the students draw a winter squash on the paper and have them cut it out.
6. Have the students write their names on the front using crayons if they can.
7. On the backside of the squash cut outs, have the students glue pieces of yellow yarn to represent the strings inside the squash. Have the students count 5 corresponding seeds and glue them on the string. Allow to dry.
8. Hang in classroom or tape to window so both sides are displayed.

# ACTIVITIES TO EXTEND THE LEARNING EXPERIENCE

## Week 1-2 (optional)

Set a table aside for a **Squash Discovery Lab**:

- Set up a table or area with a green pumpkin (with a small patch of orange on it), two small pumpkins, one large pumpkin and an array of gourds.
- During free play time encourage them to sort them by color, shape and texture (bumpy and smooth).
- Encourage them to lightly tap them. What sound does it make, are some louder, deeper, etc.
- Make available scientific tools such as measuring tapes/rulers, a scale, magnifying glasses, etc.
- Let them explore the various seeds and observe them as they dry over the next few days.
- When some are dry, open them to reveal the seed within.
- Make available paper, pencils and crayons for students to draw their observations. Teachers can write down the student's observations on each student's paper or collectively on one large paper.
- Will the green pumpkins turn orange now that it is no longer on the vine?
- Observe the pumpkin over the next 2 weeks to see what will happen.

## WEEK 2 (optional)

Fingerplay Song

*Pumpkin Trees* by Deirdre Banks

<b>It's harvest time and what do I see?</b>	Put hand to forehead, look around
<b>Pumpkins! Pumpkins in a tree!</b>	Point upward
<b>In a tree? That can't be!</b>	Place hands on cheeks.
<b>Where, oh where, should pumpkins be?</b>	Throw hands outward
<b>On the ground? Yes, on the ground!</b>	Point to ground
<b>That's where pumpkins should be found!</b>	Place hands on hips

## WEEK 3 (optional)

### Do Pumpkins Float? (explore as a class or in small groups)

- You can create a large graph with the question "Do Pumpkins Float?" and write their names in the "yes" or "no" column to chart their predictions *or* simply ask the students to raise their hands for "yes" or "no" and take a count.
- Fill a large bucket with water. Have a students place a small pumpkin in the water.
- Does it float?
- How about stem up, stem down, sideways?
- Ask the class to guess why it floats. (It floats because it is hallow inside and filled with air like a balloon)
- You can also test if other fruits or vegetables will float, be sure to ask the class what their predictions are before testing.
- Some fruits and vegetables to consider testing: Apples, peppers, bananas, carrots, zucchini.

## Enhancing the Experience in Your Organic School Garden

November is a great time to start planting:

Beets	Bok Choy	Broccoli	Brussels Sprouts	Cabbage
Carrots	Cauliflower	Chard	Chives	Collards
Fava Beans	Herbs	Kale	Kohlrabi	Leeks
Lettuce	Mustard	Onions	Peas	Radishes
Spinach	Turnips			

# Food Experience Calendar

## **Week 2      Mini Pumpkin Pies**

Optional      Pumpkin Apple Butter

Optional      Roasted Pumpkin Seeds

Optional      Pumpkin Bread

# FOOD EXPERIENCE RECIPES

## Week 2

### **Pumpkin Dip/ Mini Pumpkin Pies**

½ can (15 ounce) pumpkin

*or use pumpkin puree recipe in optional "Pumpkin Bread" recipe*

8 ounces fat-free cream cheese, softened

2 Tablespoons brown sugar

½ teaspoon cinnamon

½ teaspoon pumpkin pie spice

1 small box of graham crackers

### **Directions:**

1. Open the can of pumpkin and place in a bowl. Cover and refrigerate at least 1 hour prior to making this recipe (so the dip will be chilled).
2. Place remaining items into the bowl of pumpkin and mix together until creamy.
3. Place one Tbsp of the pumpkin dip on each plate with a graham cracker.
4. Taste!

Makes 20 Taste Tests

Developed by *Network for a Healthy California-Merced County Office of Education*

## Optional

### **Pumpkin Apple Butter**

1 (15 oz.) can of pumpkin  
1 cup apple, peeled and grated  
½ cup apple juice  
2 Tablespoons light brown sugar  
¾ teaspoon pumpkin pie spice  
Cinnamon raisin bagels, sliced into chunks

#### **Directions:**

1. Combine ingredients in a saucepan and mix together.
2. Cook on medium-high heat until the mixture boils. \*\*
3. Reduce heat to low and continue cooking for 1 ½ hours. Stir mixture occasionally.
4. Store in an airtight container in the refrigerator.
5. Serve cold and spread on graham crackers or bagels chunks.

\*\*This recipe can be made using a microwave. Use a microwave safe container and cook on high heat until mixture boils (stir every minute). Continue to cook until it has thickened.

Makes approximately 24 taste tests (2 Tablespoons each)

Recipe adapted from [www.VeryBestBaking.com](http://www.VeryBestBaking.com)

### **Roasted Pumpkin Seeds**

Seeds from a large pumpkin (rinsed and dried)  
2 Tablespoons olive oil (or olive oil cooking spray)  
Salt/Pepper (if desired)

#### **Directions:**

1. Preheat oven to 375 F
2. Scatter seeds onto a cookie sheet in a single layer and drizzle
3. Sprinkle with salt (and pepper) and toss to coat
3. Bake for 5-8 minutes. Ready when light brown and toasty

Makes about 1 to 1 ½ cups (about 20 small handful each)

Recipe from Rosa Romero, Farm to Preschool

## Pumpkin Bread

1 1/2 cups flour  
1/2 teaspoon of salt  
1 cup sugar  
1 teaspoon baking soda  
1 cup pumpkin purée\*  
1/2 cup olive oil  
2 eggs, beaten  
1/4 cup water  
1/2 teaspoon nutmeg  
1/2 teaspoon cinnamon  
1/2 teaspoon allspice  
1/2 cup chopped walnuts

*\* To make pumpkin purée, cut a pumpkin in half, scoop out the seeds and stringy stuff, lie face down on a foil or Silpat lined baking sheet. Bake at 350°F until soft, about 45 min to an hour. Cool, scoop out the flesh. Freeze whatever you don't use for future use. Or, if you are working with pumpkin pieces, roast or boil them until tender, then remove and discard the skin.*

### Directions:

1. Preheat oven to 350°F
2. Sift together the flour, salt, sugar, and baking soda.
3. Mix the pumpkin, oil, eggs, 1/4 cup of water, and spices together, then combine with the dry ingredients, but do not mix too thoroughly. Stir in the nuts.
4. Pour into a well-buttered 9x5x3 inch loaf pan. Bake 50-60 minutes until a thin skewer poked in the very center of the loaf comes out clean. Turn out of the pan and let cool on a rack.

Makes one loaf (about 20 slices)  
Recipe adapted from [www.simplyrecipes.com](http://www.simplyrecipes.com)