

Pumpkins and pancakes

Fall lesson

Activity: A Fall lesson where we learn about pumpkins and their relatives while each child mixes cooked, fresh pumpkin with other ingredients to make individual servings of pancake batter. Pancakes will be cooked by supervising teachers or garden parents. This lesson needs to be inside during inclement weather.

Goal: To learn about this diverse group of plants and their place in our diet, to practice safe and proper cooking and measuring skills.

Supplies: Cooking cart, electric frying pan, and/or electric burner and pan, extension cord; measuring cups and spoons, bowls, plates, forks, spoons, pancake turner, pancake mix, pumpkin (precooked by parent), brown sugar, water, examples of pumpkin relatives.

How to Proceed

Familiarize yourself with the attached background information on pumpkins and cooking for useful concepts you may convey to your students during the lesson.

You should have ready a small ‘sugar pie’ type eating pumpkin for each class, which you should have precooked in the microwave by cooking on high for 5-15 minutes (test by seeing if the pumpkin is getting soft and squishy). You should also have on hand a “show and tell” box of pumpkin information and measuring utensils. If you find you have time before, after, or during the lesson, occupy students with the “show and tell” exercises. They can practice measuring and/or fill out worksheets while they wait.

Find a place where students can mix ingredients and where you can get power to cook the pancakes.

Emphasize sanitation during food prep. Have students wash and dry their hands properly before the lesson. Point out that they should try to keep their hands clean as they are preparing the food (i.e. don’t play with hair, face, pick up stuff on ground, etc.).

Consult the recipe for Individual Pumpkin Pancakes and discuss it with the children.

Show the children the spoon measures and show/discuss how you would measure the water and the brown sugar. Point out that the measures are only accurate if the spoon is filled up level to the edge. Brown sugar should be pressed into the spoon so that it holds its shape. Show them the cup measures and show/discuss how the cups again must be leveled in order to be accurate.

Pass out forks and bowls to each student. Open your cooked pumpkin and show the strings and seeds in the inside. Remove this part and set aside and cut up your cooked pumpkin into pieces about 1.5 to 2 inches square.

Pass one square of pumpkin to each child. Instruct them to remove the skin and mash the pumpkin with their forks. They should then add 1 tsp. of brown sugar and 3 tbsp. of water into their mashed pumpkin. Have them add the cinnamon if they wish and mix well.

In the meantime, gather the skins and add them to the strings/seeds. You will add these to our worm composter at the end of the lesson.

After their liquid ingredients are mixed, have them add the pancake mix to the pumpkin mixture.

Now you are ready to begin cooking the pancakes. Grease the pan if needed with cooking spray before you start. As students finish their mixing, have them bring their batter to you to cook. As you empty their batter, have them go wash out their forks and bowls. They can reuse their forks to eat the pancakes. Serve them their pancakes, they can sprinkle them with cinnamon sugar if they wish.

At the end of the lesson, take your pumpkin scraps to the Willett Worm composter to feed the worms. If you have time to include them, the children will enjoy poking around the box. Clean up cooking and mixing equipment for the next class.

Background—pumpkins

Pumpkins belong to the Cucurbitaceae family of plants, which includes squashes, cucumbers, cantaloupes, watermelons and gourds. Members of this family of plants are found all over the world and have been cultivated for many centuries. Gourds found in Mexico have been dated back to 7000 B.C. Native Americans roasted and ate pumpkins, and pumpkin pie may have arisen from a dish that the colonists made by roasting a hollowed-out pumpkin filled with milk, spices, and honey.

Cucurbits all grow as vines, and they have separate male and female flowers. The male flowers contain the pollen, and only the female flowers will form the fruit upon successful pollination. There are two major kinds of pumpkins that appear in the stores around Halloween. One type of pumpkin grows large and makes great Jack-o-lanterns but is not very good to eat. A different type of pumpkin stays smaller and is good for eating and carving.

Pumpkins, like other deep orange and dark green fruits and vegetables, are high in beta carotene, a plant substance that is converted to vitamin A in the body. Vitamin A is a component of our eye's night vision system that allows the eye to readjust to darkness after exposure to light. Vitamin A is also necessary to maintain the health of tissues that line the eye, respiratory, digestive and other systems. In the USA, the usual symptoms of a vitamin A deficiency would be temporary "night blindness," but in other parts of the world where famine is common, severe, long-term deficiencies in this vitamin can leave vital systems vulnerable to life-threatening infections.

Pumpkins and other winter squashes contain moderate amounts of potassium, a mineral necessary for fluid balance in the body. Pumpkins are also good sources of fiber.

Background—cooking

A basic part of cooking is sanitation, before, during and after cooking. Children should know that improperly prepared food can make them ill, and they should learn to wash their hands and keep them clean during cooking procedures. Certain very spoilable foods, like raw meat, can harbor bacteria before cooking and should be kept away from other foods during preparation. After cooking, tools and spills should be cleaned up and put away.

Another part of cooking, especially baking, is accurate measurement. Children should learn how to measure liquid and dry ingredients, and become familiar with U.S. cup measures, tablespoons and teaspoons. They should also be aware that different types of measures are used for cooking in other countries.

Proper knowledge of nutrition is important to good cooking. Good cooking should be good and good for you. A good cook should have a knowledge of the basic food groups (breads and cereals, fruits and vegetables, meat and dairy, fats and oils) and the food pyramid, and should try to serve nutritionally balanced meals.

A good cook should learn to use the freshest ingredients in recipes, because fresh ingredients will make the best foods to eat, both in taste and nutrition. A good cook should know the times of the year that various local fruits and vegetables become ripe and ready for harvest, because that will be the time when these ingredients are at their best.

Finally, waste reduction is part of cooking. We should learn to compost our fruit and vegetable scraps in a compost pile or a worm bin. We can try to buy ingredients in recyclable packaging or in bulk to reduce garbage. We can try to buy fewer processed food products that use large amounts of packaging material.

Individual serving, pumpkin pancakes

One 1.5 to 2 inch square, cooked pumpkin (remove skin and mash)

1 tsp. brown sugar

3 Tbsp. Water (for a thick cake, add more for thin cake)

dash of cinnamon

1/4 c. Krusteaz buttermilk pancake mix

Makes 2, moist, 4 inch pancakes.

Mix mashed pumpkin with brown sugar, water, and a dash or so of cinnamon. Add pancake mix and stir until a thin batter is made. Lumps are okay, don't overmix. Cook on a greased or nonstick pan on medium heat. Pancakes are ready to flip when bubbles appear on the surface and the edges appear slightly dry and cooked. These pancakes may be more fragile than usual because of the added pumpkin.

You may sprinkle the pancakes with cinnamon sugar.

Recycle any pumpkin scraps in the vermicomposter.

Sample outline for lesson—class of 20, working in 2 groups of 10

-students wash hands

-talk about pumpkins, nutrition, how to measure in cooking

-pass out bowls, forks, pieces of precooked pumpkin to each child

-assist children as they proceed through recipe

-meanwhile, heat griddle (400) or pan

-one by one, children bring batter to be cooked

-pour out batter, give fork and bowl back to be washed by child

-keep track of each child's pancakes by placing labeled paper plate adjacent to pancakes

-pancakes are almost ready when children are done washing bowls

-serve pancakes with optional cinnamon sugar

-clean up utensils, replenish supplies in containers for next class

-put pumpkin scraps in worm bin

WORKSHEET: THE PUMPKIN FAMILY

Can you name three members of the pumpkin family?

List anything you have eaten or used from the pumpkin family during the past week.

Is a pumpkin a fruit or a vegetable?

How many poems or stories can you think of that feature a pumpkin?

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WORKSHEET: MEASURES FOR COOKING

Can you tell which is the 1 cup measure? The 1/2 cup? The 1/4 cup?

How many 1/4 cups will fit into 1 cup? _____

How many 1/2 cups will fit into 1 cup? _____

How many 1/4 cups will fit into 1/2 cup? _____ How can you prove it?

How many Tablespoons will fit into 1/4 cup? _____ Can you prove your answer?

Notice the cup measure used for liquids. How do you tell the amount you are measuring? Would it be good for measuring dry ingredients?