

## SEEDS, WEEDS & GARDEN READS

Michigan 4-H Gardening & Nutrition Activities for 5- TO 8-Year-Olds

# The Run Away Pumpkin



### Objectives:

The children will be able to:

- Identify pumpkins as an edible fruit
- Explain that pumpkins can be used for both food and decorations
- Follow a recipe to make pumpkin-based foods

### Learning and Life Skills:

- Cooperating
- Problem solving
- Sharing
- Healthy lifestyle choices

### Ages:

5 to 8

### Michigan Grade Level Content Expectations:

#### Science

#### Kindergarten through Grade 3:

Make purposeful observation of the natural world using the appropriate senses (S.IP.00.11, S.IP.01.11, S.IP.02.11).

**Grade 2:** Identify the needs of plants (L.OL.02.14).

Listed above are the Michigan Science standards and benchmarks met through Weed, Seeds, and Garden Reads. For a correlation guide for National Common Core standards for ELA and Math go to:

### TIME:

90 minutes

### SETTING:

Space with tables and chairs, and preferably with running water if you'll be making pumpkin pie in a bag.

This story is recommended to read as a Halloween story but could be read when kids are planting pumpkin seeds in the garden.

### MATERIALS:

- 1 copy of *The Run away Pumpkin*. (2003). Lewis, Kevin (auth.), & Schindler, S. D. (illus.). New York, NY, Orchard books
- Newsprint or other large paper
- Markers

- Masking tape
- Small pumpkin (one per child)
- Paint markers
- Paint brushes (one per child, if they are painting)
- Paint shirts (one per child, if they'll be painting)
- Recipe ingredients/supplies
- Quart size Zip lock bags( one per 2 children)
- Plates or cups (one per child)
- Napkins (at least one per child)
- Spoons (at least one per child)
- "Pumpkin Pie in a Bag" handout (one per child)
- Large photos of pumpkins of different colors, shapes, sizes or samples of pumpkins

## PROCEDURE:

### Before the meeting:

1. Review the background information and activity directions.
2. Gather the supplies and recipe ingredients you'll need for this activity. Find a copy of *The Run Away Pumpkin* at your local library or bookstore.
3. Photocopy the "Pumpkin Pie in a Bag" handout
4. Paint a pumpkin to show for an example if desired.
5. Display the photos or pumpkins where everyone can see them.
6. Have fun.

## BACKGROUND INFORMATION:

### Pumpkin Facts

Pumpkins are fruits, they are a type of squash and in the same family as cucumbers, squashes and melons.

Pumpkins are native to North America and have been domestically grown there for five thousand years. In 1584, after French explorer Jacques Cartier explored the Saint Lawrence region of North America, he reported finding "gros melons" (large melons). The name was translated into English as "pompions," which has since evolved into the modern "pumpkin."

90—95% of pumpkins grown in the United States are grown in Illinois.

The largest pumpkin ever grown was over 1,818.5 pounds in Wellington Ontario, Canada in 2011

Pumpkins have two kinds of flowers, male flowers and female flowers. Plants with male and female flowers are called monoecious plants. The male flowers blossom first, they do not produce fruit. Male flowers produce pollen. Male flowers only bloom for one day and then drop off the plants. The male flowers are followed by the female flowers. Bees carry the pollen from the male flowers to the female flowers. A female flower is easy to recognize, there is a baby pumpkin at the base of each female flower. Pumpkin flowers are edible.

There are many foods made with pumpkin. Pumpkin bread, and soup are two popular treats made with pumpkin and Thanksgiving would not be complete without pumpkin pie.

Pumpkins are fat free, cholesterol free, sodium free. There are 25 calories in one cup of pumpkin puree. Pumpkins are high in fiber and are they are good sources of Vitamin A, Vitamin B, potassium, protein, and iron.

### Pumpkin Seeds Facts

Pumpkins and their seeds, were a celebrated food of the Native American Indians who treasured them both for their dietary and medicinal properties.

The cultivation of pumpkins spread throughout the world when the European explorers returning from their journeys. The explorers brought back many of the agricultural treasure from the New World to Europe.

While pumpkin seeds are featured in the recipes of many cultures, they are used often in traditional Mexican cuisine. Pumpkin seeds have recently become more popular as research suggests that they have unique nutritional and health benefits.

## During the meeting:

1. Have the group sit in a circle around you. Read aloud or paraphrase the following:

*We're going to read a story called The Run Away Pumpkin this story is about Buck and Billy Baxter and their little sister, Lil. They climb a hill on Halloween when they happen upon an enormous pumpkin. They cut the pumpkin from its vine and down the hill it tumbles, crashing through the family farm. This makes for an exciting adventure for Buck, Billy, Lil and the pumpkin on Halloween day.*

2. Read the story aloud to the group, showing them the pictures as you go. Encourage them to hold their comments and questions about the story until you're finished reading.
3. When you've finished reading the story, give the group a minute or so to think about the adventures of the giant pumpkin. Then ask for volunteers to answer the following questions. Write their responses on the newsprint.
  - *What happened to the pumpkin after Baxter and Billy cut it from the vine?*
  - *What do you think all the animals thought of the pumpkin crashing into their pens?*
  - *What were Mama Baxter , Poppa Baxter and Grandpa Baxter thinking of when they saw the giant pumpkin rolling down the hill and crashing into the pig sty and chicken coop?*

4. Now ask them if they have gardens, and if they do, what they grow in their gardens. Record their answers on the newsprint. Then ask the following questions:

- *Have you ever grown pumpkins?*
- *Did you grow big pumpkins or little pumpkins?*
- *Have you ever visited a pumpkin patch?*
- *Have you ever tasted pumpkin pie? Pumpkin bread?*
- *Did you know pumpkins are really a fruit? A fruit is the plant part that holds the seeds.*
- *What other vegetables in your gardens hold seeds inside? (peppers, cucumbers, squash, tomatoes, etc.)*

5. Now tell the group that they are going to decorate their own pumpkins to take home.

6. Cover the table with newsprint or a plastic table cloth. Hand out the pumpkins, paint, paint brushes and paint shirts, or markers if you are using markers instead of paint.

7. Give the group few minutes to paint the pumpkins. Be sure to write their names on their pumpkins and set aside to dry.

8. Prepare and enjoy the "Pumpkin Pie in a Bag" snack.

### More Pumpkin Facts

The bright orange color of pumpkin is a dead giveaway that pumpkin is loaded with an important antioxidant, beta-carotene. Beta-carotene is one of the plant carotenoids converted to vitamin A in the body. In the conversion to vitamin A, beta carotene performs many important functions in overall health.

The most popular use of pumpkins is for decorations and jack-o-lanterns. When selecting a pumpkin for cooking, the best selection is a "pie pumpkin" or "sweet pumpkin." These are smaller than the large jack-o-lantern pumpkins and the flesh is sweeter and less watery. However, you can substitute the jack-o-lantern variety with fairly good results.

### Halloween Facts

Jack o' Lanterns originated in Ireland where people placed candles in hollowed-out turnips to keep away spirits and ghosts.

Pumpkins also come in white, blue and green. Great for unique monster carvings!

Halloween was brought to North America by immigrants from Europe who would celebrate the harvest around a bonfire, share ghost stories, sing, dance and tell fortunes.

## Growing a Giant Pumpkin

Pumpkin seeds germinate between 70—75 degrees F. in 7-10 days. Many people start pumpkin seeds indoors about 3 weeks before planting outside.

Pumpkins need a lot of sun. Choose the sunniest place you have. Pumpkins are sensitive and will need shelter from wind and frost. Try to protect pumpkins from the worst of the elements by covering them during heavy rains, or putting up some kind of barrier to protect the vines from high winds or using shade during the summer's hottest days.

You need a big vine to produce a big pumpkin. This will be your pumpkin factory. You need 100 or more leaves on each vine to try and grow a 300 pound pumpkin.

Pumpkins like and need a lot of water, in the dry season they need 20 –30 gallons of water twice a week. They should be watered in the late evening.

They need good well-drained soil. You can dig it up by hand. Prepare the soil in early spring, as soon as the ground is warm, Fertilize the patch good with four inches of rotting cow manure. Pumpkins do best in soil that is slightly acid or nearly neutral .

When two or three fruits on each plant reach the size of softballs, remove all but the best one and start to prune the pumpkin plant. After the primary vine has reached 20 feet, pinch off the side shoots so the vines won't divert food and water from the pumpkin. Break off all other female flowers.

Nighttime is when pumpkins grow, most expand two inches in circumference (around) every night.

**Curiosity Cat says, "I love to read about growing things!"**



## TALKING IT OVER:

After everyone has enjoyed the snack and the room is cleaned up, bring the children's attention back to the group and ask the following questions:

- *Have you ever eaten pumpkin before?*
- *What have you eaten that was made out of pumpkins?*
- *Have you ever eaten pumpkin pie?*
- *Have you ever eaten pumpkin bread?*
- *Have you ever eaten pumpkin soup?*
- *Have you ever carved a jack-o-lantern?*

*Record the answers on newsprint. You could make a chart to show how many children have eaten each item.*

## TRY THIS, TOO:

### Roast Pumpkin Seeds

Toasted and salted pumpkin seeds have a nutty flavor.

Rinse pumpkin seeds under cold water and pick out the pulp and strings. This is easiest just after you've removed the seeds from the pumpkin, before the pulp has dried.

- Place the pumpkin seeds in a single layer on an oiled baking sheet, stirring to coat. If you prefer, omit oil and coat with non-stick cooking spray.
- Sprinkle with salt and bake at 325 degree F until toasted, about 25 minutes, checking and stirring after 10 minutes.

## RECIPE

### Pumpkin Pie in a Bag

#### INGREDIENTS:

- 1/8 cup milk
- 2 tablespoons canned pumpkin
- Dash of pumpkin pie spice
- 1 tablespoon vanilla pudding mix
- Crushed graham crackers (1/2 cracker per participant)
- Whipped topping

#### EQUIPMENT:

- Quart sizes Zip lock freezer bags
- Measuring cups
- Measuring spoons
- Serving spoons
- Plastic cups
- Scissors

#### PROCEDURE:

1. Have the group members wash their hands with soap and warm water for 20 seconds before beginning to prepare the recipe. Be sure that all work surfaces are clean.
2. Combine the milk and instant pudding in the bag
3. Remove the air from the bag and seal it.
4. Squeeze and knead with hands until the mixture is blended—about one minute.
5. Add pumpkin and pumpkin pie spice
6. Squeeze and knead with hands until blended—about two minutes.
7. Crush up the graham cracker and place 2 tablespoons of graham cracker crumbs in the bottom of the small cups
8. Cut the corner of the freezer bag and squeeze pie filling into the cups.
9. Garnish with whipped topping
10. Provide spoons and enjoy

- Let cool and store in an airtight container.

Pumpkin seeds can be eaten as a snack or used as an ingredient in recipes.

They also have many vitamins and minerals. And are very high in protein and magnesium, both of which help to

build energy, control blood pressure and regulate body processes

Pumpkin seeds are high in zinc, an essential mineral for the human body. Zinc boosts the immune system and can even help to prevent diseases such as osteoporosis.

Roasted pumpkin seeds have