

Pumpkins - Activities

Grade Levels: K-5

Purpose: Children will learn a variety of subjects including history, science, nutrition, and math through the study of pumpkins.

Pumpkins Needed: 1 Orange Medium Pumpkin and 3 Orange Small Pumpkins

Activity 1: The Great Pumpkin Story and Pumpkin Predictions

Materials

- *The Great Pumpkin Story* activity sheet (PDF link on Vista Ranch website)
- *Pumpkin Exploration* activity sheet (PDF link on Vista Ranch website)
- Pumpkins, 1 per group
- String, rulers, and scale (for weighing pumpkins; a bathroom scale will work)

Procedures

1. Have children read *The Great Pumpkin Story* and answer the questions at the end.
2. Divide the children into groups of four. Provide each group with a pumpkin (do your best to get pumpkins that are quite different from one another).
3. Hand out the activity sheet *Pumpkin Exploration* to each child.
4. Ask the groups to estimate the height, diameter, and weight of their pumpkin and fill out their activity sheet.
5. Ask children to guess which group has the largest pumpkin. Which pumpkin weighs the most? Do they think the largest pumpkin will weigh the most? Will the smallest pumpkin weigh the least? Which two pumpkins are the closest in size? Which two pumpkins are the closest in weight?
6. Next, provide each group with a ruler, some string (for measuring the diameter), and access to a scale (a bathroom scale will work). Ask each group to weigh and measure their pumpkin and fill out their activity sheet.
7. Were their predictions correct?

Author:

- Utah Agriculture in the Classroom
- Cultivating Knowledge - Connecting Us All

utah.agclassroom.org

- Lesson Plans can be found using the following links:

Pumpkins... Not Just for Halloween

<https://utah.agclassroom.org/matrix/lesson/545/> (Grades K-2)

<https://utah.agclassroom.org/matrix/lesson/131/> (Grades 3-5)

Activity 2: Pumpkin Peddlers

Materials

- *Pumpkin Peddlers* activity sheet (PDF link on Vista Ranch website)
- Newspaper
- Knife
- Plastic cups, 10 per group
- Resealable bags, 1 per group
- Large spoons

Procedures

1. Part of the botanical definition of a fruit is that seeds will be found inside. Ask your children to predict how many seeds they might find inside their pumpkin.
2. Hand out the activity sheet *Pumpkin Peddlers* to each child, and pass out ten cups and one resealable bag to each group.
3. Using the activity sheet, have each group record a reasonable price for the pumpkin and their estimate of how many seeds the pumpkin will contain.
4. Place newspapers underneath each pumpkin, and cut off the tops of the pumpkins so that children can dig out the seeds. You may want to provide metal spoons for this. Children should take turns digging out the seeds. As the seeds are removed, other children in the group should clean off the fibers, dry the seeds using a paper towel, and then begin to fill the paper cups with groups of ten. When all ten cups are filled, pour the one hundred seeds into a resealable bag, keeping a tally of how many hundreds are emptied into the bag.
5. Were their predictions accurate? Did larger pumpkins have more seeds than smaller pumpkins. Did weight have an influence on the number of seeds? You may want to graph the results of each group's seed count.
6. Discuss how many pumpkins could be grown from one pumpkin. Help children fill in the rest of their worksheet by calculating how much money their pumpkin could generate by multiplying the price they would sell their pumpkins for by how many seeds were in it.

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Activity 3: Sprouting Pumpkin Seeds

Materials

- Clear plastic cup (for planting)
- Paper towels
- Cotton balls
- Craft/popsicle stick

Instructions

1. Provide each child in the group with a clear cup, a paper towel, some cotton balls, a craft stick, and four pumpkin seeds—the ones they cleaned out in Activity 2 will work just fine. (Try to schedule this activity for a Friday, as the seeds won't sprout over the first two days).
2. Children should tear or cut a three-inch wide strip from the paper towel. This strip should be placed around the inside of the cup. Children should trim the towel if there is a lot of excess so that there is only one layer around the inside.
3. Next, have children fill the center of the cup with cotton balls. Tell them to thoroughly dampen the cotton by setting the cup under a dripping faucet. The cotton will moisten the paper towel. No water should drip to the bottom of the cup.
4. Ask the children to insert the pumpkin seeds between the cup and the paper towel. You can have them place some of the seeds with the pointed end up and some with the pointed end down.
5. Label each cup with the group's name. Set the cups on a sunny windowsill. Instruct groups to water as necessary and to watch for the seeds to grow. You may want them to draw how the seedlings look on each day once they sprout and begin to grow.

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Activity 4: The Great Pumpkin

This is a fun and simple activity in which children will make a paper-plate model of the life cycle of a pumpkin.



Materials

- *I'm a Seed* story link: <https://www.youtube.com/watch?v=CiMTc97hkUw>
- White paper plates, 2 per children
- Markers or crayons: black and orange
- Green yarn—an arm-length piece for each child
- Construction paper—brown, green, yellow, orange
- *Paper Patterns* (PDF link on Vista Ranch website)
- Hole punch
- Stapler
- Scissors—several pairs for children to share

Procedures

1. Listen to *I'm a Seed* story using the following link:
<https://www.youtube.com/watch?v=CiMTc97hkUw>
2. Have each child draw a Jack-o-lantern face with a black marker or crayon on the back of one of the paper plates. Color the rest of the plate and the back of the second plate orange.
3. Trace the paper patterns onto the construction paper using the appropriate colors. Another option is to copy the pattern directly onto the construction paper. Cut the shapes out and punch a hole in the top of each one.
4. Discuss the life cycle of a pumpkin plant with children as they are working. First, the seed is planted. From the seed a plant sprouts, growing leaves and then flowers. From the flowers, small green pumpkins form. When the pumpkins are ripe, they turn orange and can be harvested. Inside of the ripe pumpkin are many seeds which can be planted to start the cycle again.
5. Thread the yarn through the holes of the seed, leaf, flower, green pumpkin and orange pumpkin in the correct order of their formation on the pumpkin plant. Tie a simple knot at the top of each plant part.
6. Staple the end of the yarn closest to the orange pumpkin shape to the front of the plate without the face.
7. Staple the paper plates together around the edges with the orange sides facing out. Leave a gap on one side of the pumpkin to pull the seed, leaf, flower, and growing pumpkins out with the piece of yarn. Slide the string of plant parts into the center of the Jack-o-lantern.
8. The children can practice describing the life cycle of the pumpkin by slowly pulling the seed, leaf, flower, and growing pumpkins from the Jack-o-lantern.

Author(s): Rose Judd-Murray

Organization Affiliation: Utah Agriculture in the Classroom