

The Pumpkin Rot Experiment

What happens to our pumpkin after the fall season?



Duration: 45 minutes (plus ongoing observation)

Grade Level: Pre K-1st

Location: In class: Intro & Conclusion

Outside: Rotting Pumpkin Observations

Recommended Pumpkin Books:

- [Pumpkin Jack](#) by Will Hubbell

- [Sophie's Squash](#) by Pat Zietlow Miller

Materials:

-2 class pumpkins- one carved, one whole

-Magnifying lenses

-Measuring tapes

-Pumpkin Life Cycle handout (included)

-The Pumpkin Rot Experiment journal template (included)

-[6 Plant Parts Song](#)

Theme: Decomposition is a part of the life cycle of a pumpkin!

Goals: Students are introduced to the different stages of a pumpkin life cycle. Students make observations about their class pumpkin, and draw/record their daily observations throughout the decomposition process, comparing carved & uncarved pumpkins.

Introduction (20 mins): *Read a favorite pumpkin book*

Work with the class's existing knowledge and what you read in the book to define the stages of life for plants and animals as a "life cycle". How do pumpkins grow? What is their life cycle? Draw on board or have students act out the different stages, identifying which plant parts grow at each stage. (Optional: sing [The 6 Plant Parts Song!](#)) Have students color the Pumpkin Life Cycle handout, cut out the stages, and practice placing them in the correct order. Transition into the activity, asking: "Is there another part of the pumpkin life cycle? What happens to our orange pumpkins after the fall season?"

Activity (20 mins):

Introduce students to two pumpkins, one carved and one whole, and present the question again: "What happens to our pumpkins after the fall season?" Encourage students to predict what they think will happen to each pumpkin over time, introducing the vocabulary "rot" and "decomposition." Ask students if they expect to see any other differences between the two different pumpkins.

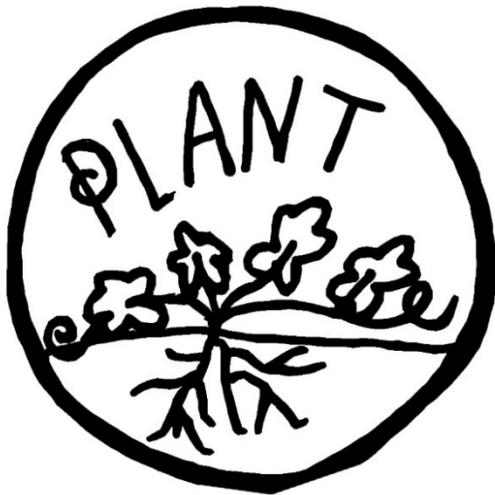
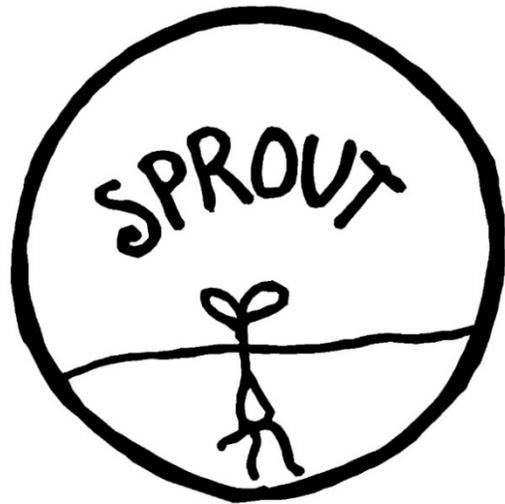
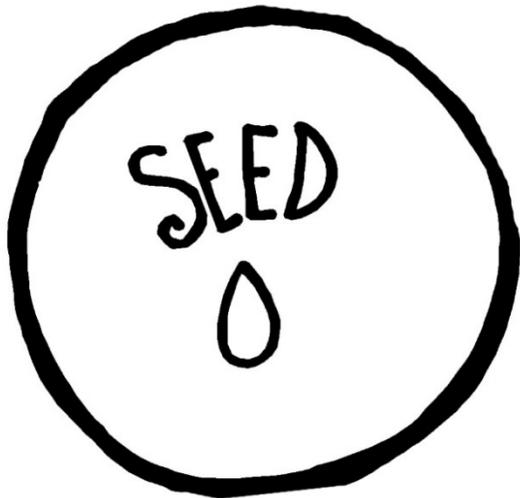
Transition outside: To keep the pumpkins out of harm's way and prevent odors, keep both pumpkins outdoors in a safe space away from heavy activity. Have students create a seated circle around the pumpkins and explain that today is Day 1 of their Pumpkin Rot Experiment. Facilitate a group discussion that leads students to use their senses to make observations about each pumpkin. Practice using descriptive language with students to share what they observe. As a group or individually, students can draw both pumpkins and record observations using The Pumpkin Rot Experiment journal template or blank paper.

Inquiry Q's:

- What do you think will happen to the pumpkin in _____ days? Weeks? Months?
- Where did your pumpkin come from? (Trace it back to the farm and backwards through the pumpkin life cycle. Where did that seed the farmers planted come from?)
- What happens to your pumpkin when it sits outside in the rain/sun/hot/cold?
- What do you see/feel/smell? (Practice sensory observation)

Conclusion (5 mins):

Have students check on their pumpkin experiment every day or at least once a week, recording observations every time. Have students close their eyes and imagine what their pumpkins will look like in ten days...a month? Five Months? How do your predictions compare to your observations over time? Collect seeds to save and plant in the springtime!



My Name:

Date	Time	Weather	Size
-------------	-------------	----------------	-------------

Draw and label what you see:
Whole Pumpkin

Draw and label what you see:
Carved Pumpkin

What do you Smell?

What do you Feel?

What do you Wonder?
