

PUMPKINS

It begins with seeds



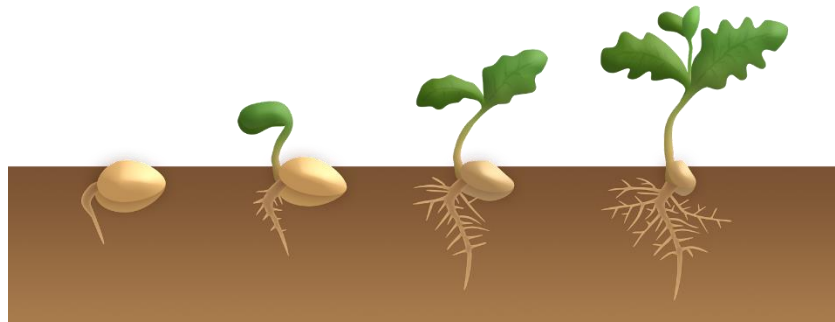
What you need...

- A pumpkin
- Suggested videos to watch before you begin:
 - Germination:
 - https://www.youtube.com/watch?v=V4IK6B_y0yk
 - <https://www.youtube.com/watch?v=tkFPyue5X3Q>
 - <https://www.youtube.com/watch?v=w77zPAAtVTul>

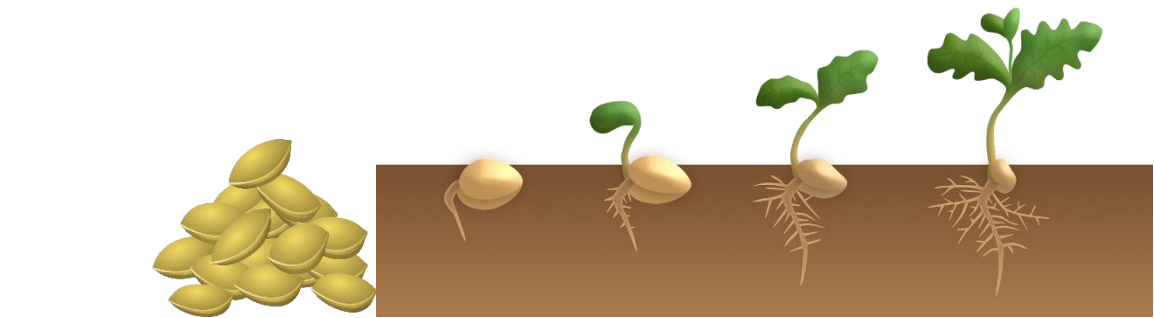
What we will be doing...

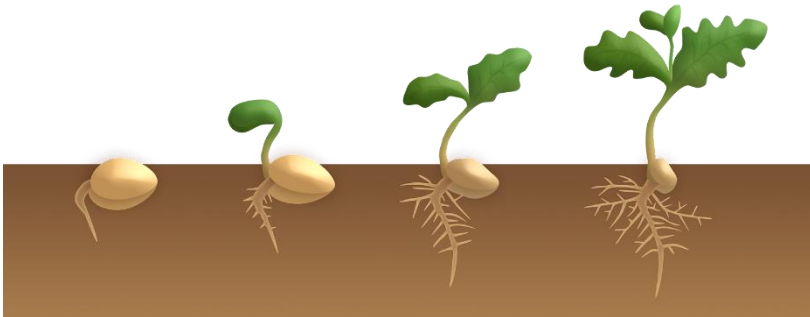
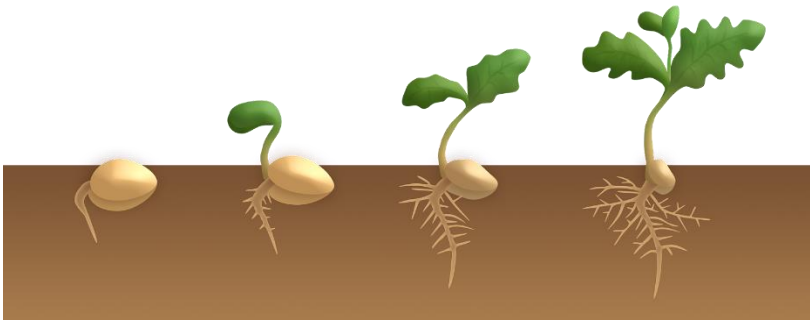
- Senses: Examining a pumpkin
- Writing: Describing a pumpkin
- Math: Hands on math with pumpkin seeds
- Science: Seed germination
- Carving a pumpkin
- This exercise will be best completed over 2 days (as the seeds need to be washed and dry - you could dry in the oven, but don't dry all in the oven, keep some for the experiment)

Seed Germination Cycle



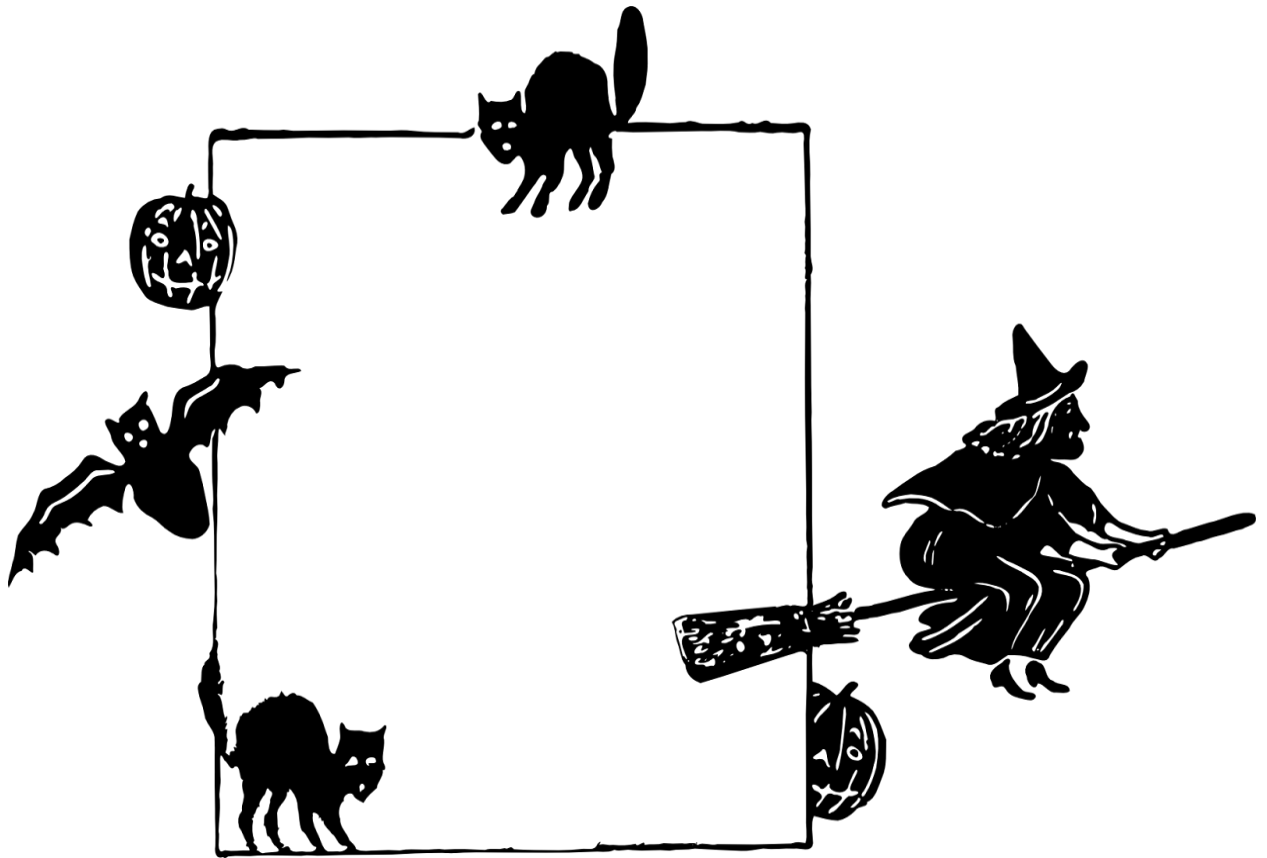
What do you think happens between 6 and 1? How do you think the seeds get back into the soil to grow a new plant? What ways can you think of?





Look and Feel

1. What color is your pumpkin? _____
2. What does it feel like? _____
3. What shape is it? _____



4.
What size? _____

Pumpkin Seed Math

Let's Measure!



How tall is your pumpkin?

Use pumpkin seeds to form groups and figure out the solutions below

1. $15 - 7 =$ _____

2. $13 + 8 =$ _____

3. $19 - 5 =$ _____

4. $13 + 4 = \underline{\hspace{2cm}}$

Pumpkin Seed Math

A black bird ate some rotting pumpkin. The bird flew away with eight (8) pumpkin seeds. He dropped all of them in a field. One week later, three (3) seeds sprouted. How many



seeds did not sprout?

John, Sara, and Mia went to the pumpkin patch to pick pumpkins. John picked six (6) tiny pumpkins. Sara picked one (1) giant pumpkin and Mia picked three (3) small ones. They put all the pumpkins in a wagon. How many pumpkins are in the wagon?



Let's Experiment

You need...

- Clean, air dried seeds
- Ziploc bag
- Paper towels
- Tape

Instructions:

- Place a moist paper towel inside the plastic bag
- Place a few seeds inside on the paper towel, space the seeds out
- Tape to a sunny window
- Keep your bag partially unzipped to prevent mold and give the seeds some air
- Observe what happens over the next week and record your observations

Print the grass and cut out to tape to the bottom of your plastic bag



Observation Log

Do you remember from the video what three (3) things seeds need to germinate? Circle them below.

Right temperature
Wind

Air

Soil

Water



What do you think will happen to the seeds?

Draw your observations

| | | | |
|-------|-------|-------|-------|
| Day 1 | Day 2 | Day 3 | Day 4 |
| | | | |
| Day 5 | Day 6 | Day 7 | Day 8 |
| | | | |

You can even keep some seeds to grow pumpkins next fall. Store in a dry place.



Plant them in your garden in August or September.



How Do You

Want to Carve or
Paint Your Pumpkin?

Draw your jack-o-lantern below