



MASSACHUSETTS
FARM TO SCHOOL

Growing without a Garden

February 6, 2023

MASS. FARM TO SCHOOL OVERVIEW

Mass. Farm to School strengthens local farms and fisheries and promotes healthy communities by increasing local food purchasing and education at schools.

Get involved through our:

- Professional learning opportunities
- Networking
- Policy/Advocacy
- Communications



PRESENTERS

Safiyat Hamiss

Food Garden Coach & Designer, Tasty Harvests LLC (Framingham, MA)

Safiyat Hamiss is the founder and owner of Tasty Harvests LLC, a food garden coaching and design business in Framingham, MA. A mother of three boys, Safiyat grew her own food in her garden during the Covid-19 pandemic and was so successful that she started Tasty Harvests to help other new gardeners do the same.

Safiyat helps new gardeners design and plant their gardens, teaches them how to grow food at home, coaches five after-school garden clubs in her community, and runs workshops and hands-on gardening activities with kids all over Framingham, MA.

Juliana Soltys

School Gardens Manager, Groundwork Somerville

Juliana joins Groundwork Somerville as the School Garden Manager with a diverse background in community-centered design, education, and sustainable farming. She maintains 10 school gardens throughout the Somerville Public School District and leads garden & outdoor programming through during school and after-school lessons. In addition, she manages the Somerville Winter Farmers Market at the Center for Arts at the Armory, one of the few winter markets in the Boston area!

AGENDA



1. Sprouts
2. Microgreens
3. Seed paper
4. Growing from seed paper
5. Resources
6. Q&A

SPROUTS & MICROGREENS



- Sprouts and microgreens can be grown year round indoors with minimal resources such as recycled kitchen containers or trays, potting soil, water and light.
- Growing sprouts and microgreens requires very little space making it perfect for the classroom setting; they can even be grown on desks or tables!
- Finally, sprouts and microgreens are easy to harvest making them an ideal project for busy teachers who want to fit gardening into their curriculum without taking up too much time!

SEEDS FOR SPROUT & MICROGREENS GROWING

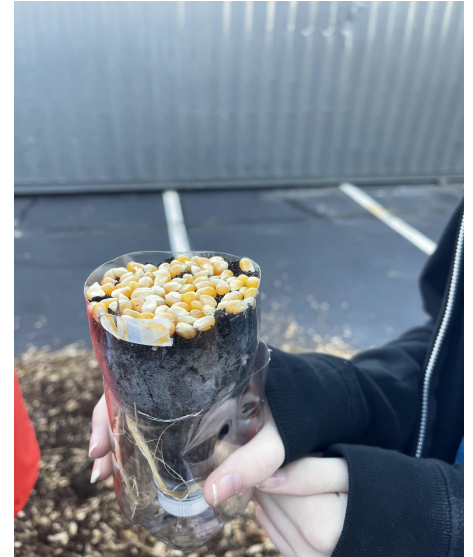
SMALL SEEDS

Alfafa
Broccoli
Basil
Beets
Brussel Sprouts
Buckwheat
Cabbage
Radish
Lettuce



LARGE SEEDS

Garbanzo
Green peas
Mung Beans
Soybean
Sunflower
Popcorn



SPROUTS

What are Sprouts?

Sprouts are the first stage of growing a plant. They are the edible seedlings that result from germinating seeds. They are usually eaten raw or lightly cooked and are a popular addition to salads, stir-fries and sandwiches.

Sprouts are known for their crunchy texture, nutty flavor and high nutritional content.

Growing Conditions

Time to Harvest	3-5 days
Growth length	about 2-3 inches
Growth Medium	Grown Hydroponically
Appearance	Grows to only the seed leaves (cotyledon)
Light requirement	No light is require
Air requirement	No air ventilation needed

SPROUT JAR SET UP



Supplies needed

- Seeds
- Mason Jar/ Glass jar
- Cheesecloth
- Water

Tips:

- You can use any size jar. 8oz, 16oz, 32oz
- Clean jars before use
- Can be place by a windowsill or table in a classroom.
- Direct light or window is not needed

SPROUT GROWING STEPS



Steps:

1. Place about a tablespoon of seeds in the jar.
2. Fill up the jar with warm water.
3. Use cheesecloth as lid to cover the jar.
4. Let it soak 6 hours or overnight.
5. Drain all the water
6. 12 hours later fill jar with water and immediately drain it.
7. Place jar in a area with indirect light
8. Repeat rinse and drain for 3-5 days.
9. Then harvest and enjoy!

Supplies needed: seeds, mason jar/glass jar, cheese cloth, water

SPROUTS

Setup



Day 1



Day 2



Day 4



SPROUTER TRAY



Supplies needed

- Seeds
- Seed sprouter tray

Steps:

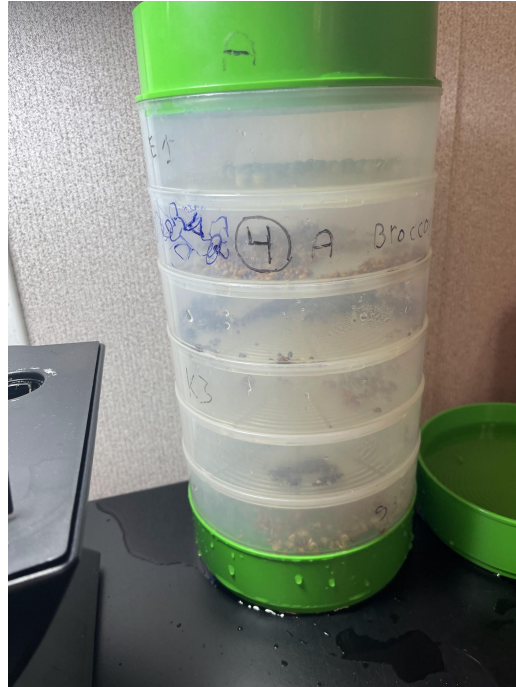
1. Place about a tablespoon of seeds in each tray
2. Fill up the top irrigation tray with warm water.
3. Place tray in an area with indirect light
4. Dump out water from bottom tray.
5. Repeat rinse process for 4-6 days.
6. Then harvest and enjoy!

SPROUTER TRAY

Setup



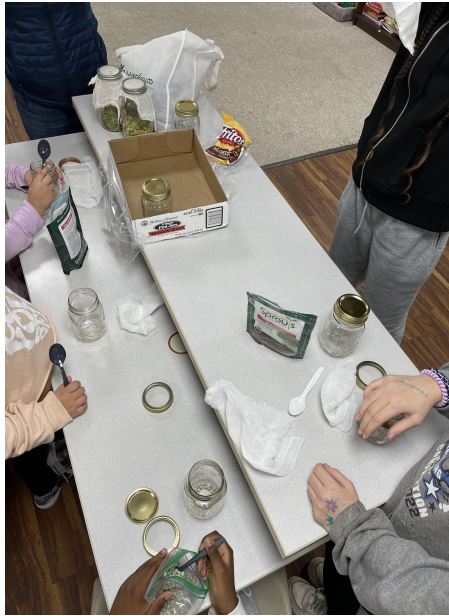
Day 1



Day 7



SPROUT GROWING ACTIVITIES



Measuring seeds, Filling jars with water & Taste testing

MICROGREENS

What is a Microgreen?

Microgreens are young greens that are harvested when they are just a few inches tall.

Microgreens are more nutritious than mature greens, as they contain higher levels of vitamins and minerals.

Growing Conditions

Time to Harvest	7-14 days
Growth length	about 4-7 inches
Growth Medium	Grown in either media Hydroponic, or soil
Appearance	Grows to form true leaves
Light requirement	requires light to grow
Air requirement needed	Requires air ventilation

MICROGREEN SETUP



SUPPLIES NEEDED

- Seeds
- Container (disposable cups)
- Potting soil
- Paper
- Water

Tips:

Any container with drainage holes can be used.
Any newspaper, paper

MICROGREEN SETUP



SUPPLIES NEEDED

- Seeds
- Container (disposable cups)
- Potting soil
- Paper
- Water

Tips:

1. Create drainage holes in the bottom of the cup. Place the cup in a second cup with no holes.
2. Prepare your soil before planting by moistening it
3. Fill the container with moistened soil
4. Spread your seeds densely on top of the soil
5. Using a spray bottle with water to mist the seeds to start germination.
6. Cover the container with paper
7. The container should be placed in a dark, warm and moist environment.
8. Daily lift the paper and mist it if dry.
9. Once the seeds have germinated and begun to grow, remove the paper

MICROGREENS

Setup



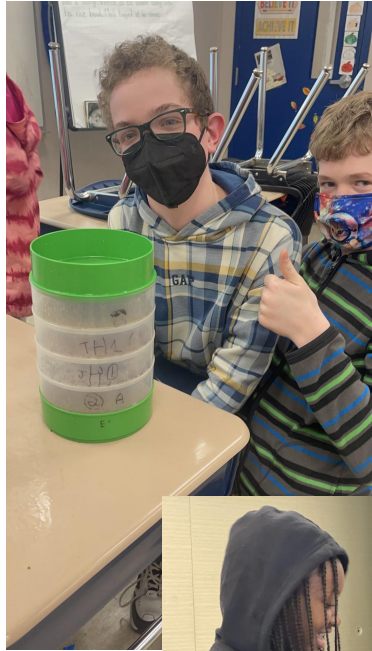
Day 1



Day 7



SPROUTS & MICROGREENS





What is seed paper?

Plantable paper made from embedded seeds & recycled paper that biodegrades and grows the desired plant

Benefits:

- Creative activity that can be done all year round
- Beautiful artifact to save & display
- Can store easily
- Act of seed saving & protecting seeds

SEED PAPER MATERIALS

- Recycled paper scraps
- Small seeds (ex. Lettuce, wildflowers, spinach is as large as I would go)
- Water
- Towels (paper & cloth)
- Blender
- Popsicle sticks
- Glue (hot glue preferably)
- Large bucket or water catching container
- [Window screen material](#)
- Food safe [marker](#) or [stamp pad](#)



PART 1: SET UP AND PREP



Setup

1. Prep Popsicle frames by gluing sticks into a square or rectangle
2. Cut out a piece of window screen that fits the frame & glue to the frame, let dry
3. Prep stations for blending pulp, paper making, and drying

Prepping Pulp

1. Gather recyclable paper
 - a. Newspapers, tissue paper, leftover construction paper
2. Tear or shred paper into small pieces & fill blender halfway
3. Pour in warm water until it's almost full & blend to make fine pulp

PART 2: PAPER MAKING

Paper Making

1. Set up water catching bucket & place screen over the bucket
2. Pour pulp onto screen, making a thin layer
3. Press down gently to remove some, but not all of the excess water
4. Place on a towel in drying area

Mixing Seeds

1. Depending on seed placing, sprinkle seeds on top of paper and mix carefully into paper pulp
2. If needed, you can go back to the water bucket and pour more pulp to integrate seeds into the paper



PART 3: DRYING



Drying

1. Option: Flip screen over so the paper is in contact with towel and gently press to separate paper from the screen
2. Use another towel and gently press to remove more water
3. Let paper dry for 24-48 hours. You can cover with paper towel or leave exposed

Removing

1. After paper is completely dry, gently peel paper off of screen
2. Store in a dry and dark place to prevent seeds from germinating
3. Write or stamp type of seed paper using food safe ink

GROWING FROM SEED PAPER



Materials Needed:

- Seed paper
- Plastic bags
- Sharpie
- Sunlight
- Growing containers(egg cartons, yogurt cups, etc.)
- Soil
- Water & spray bottle
- Plastic container(to make a mini greenhouse)

PART 4: GROWING SEED PAPER

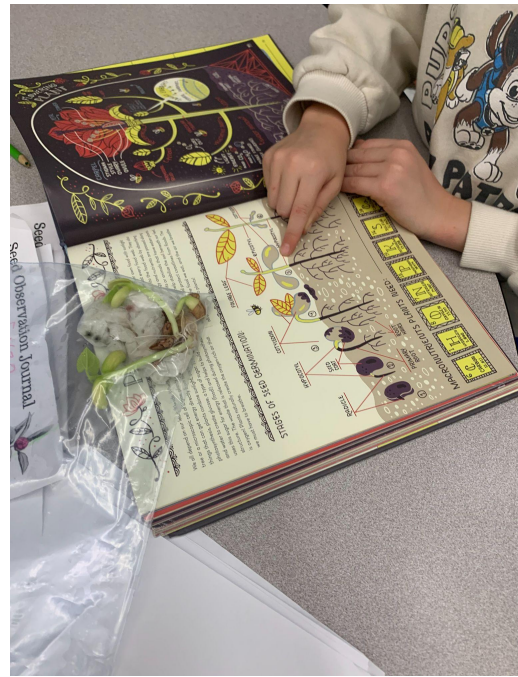


Germinating

1. Take one piece or section of seed paper and lightly mist with water
2. Place inside plastic bag & label with name, date, and plant type
3. Set bag in a sunny spot either flat or hanging and watch the seeds germinate!

Transplanting

1. After about 3-7 days depending on seed type, carefully separate seedlings from each other(it's okay if seed paper is still attached)
2. Plant in growing containers with soil and water
3. Place containers in clear plastic container to create a mini greenhouse
4. Rest lid on top and leave a small gap for air circulation
5. Water whenever soil is dry! Usually once a day







SALAD MAKING!



SEED PAPER: SUCCESSES AND CHALLENGES

Successes

1. Unique & artistic activity
2. Can break up project into 2 stages
3. Fun to watch your own plant grow!
4. Connects to art, science, and other curriculum
5. Transplant seedlings outside or grow completely indoors!
6. Great project for all ages!

Challenges

1. Need a lot of guidance & support pouring & prepping paper with younger students
2. Messy & save a lot of time for cleanup
3. Need a lot of space for drying paper on flat, hard surfaces & need good light or grow lights
4. Seedlings are super delicate and easy to kill if not watched carefully

ADDITIONAL RESOURCES



Tasty Haversts Amazon Affiliate links

- [Sprouter Tray](#)
- [Radish Seeds](#)
- [Cups](#)

Curriculum Resources

- **Mass. Farm to School** - www.massfarmtoschool.org -
Subscribe to our newsletter and stay up to date on
upcoming webinars and other professional learning
opportunities
- **Kids Garden Community** -
<https://community.kidsgardening.org/home> - Online
lessons, grant opportunities, webinars, & community boards

STAY IN TOUCH!



Visit us online: www.massfarmtoschool.org

Safiyat Hamiss, Tasty Harvests

Tastyharvests@gmail.com

Tastyharvests.com

Juliana Soltys, Groundwork Somerville

www.groundworksomerville.org

juliana@groundworksomerville.org