

Grow Your Own Microgreens

Activity for the Classroom





Introduction

Microgreens are the young, edible shoots of vegetable and herb plants. Packed with nutrients, they make a nourishing addition to meals. They can easily be grown in the classroom as a learning activity for all grade levels.

Microgreens take anywhere from five days to two or three weeks to grow depending on the plant types you select and the growing conditions. They are harvested shortly after the first leaves appear.

This resource has been adapted with permission from greenschoolsns.ca

Learning Connections

Science - observe, identify, research

Mathematics - measure

Visual Arts - observe, draw

Fulfills Course Related Outcomes for:

- Grade 3 (soil studies)
- Food/ Health and Nutrition 8
- Citizenship 9
- Culinary Trades 10
- Agriculture 11

Microgreens and Climate Action

Adapting to climate change is critical for our food system. Through growing microgreens in the classroom, students learn a method for year-round production of nutrient-dense food. This activity cultivates resiliency with the food being grown right in the location where it is eaten!



Food Security & Sovereignty: Growing food locally reduces reliance on imported food, lowers carbon footprints, and builds community health.



Microgreens Basics

Microgreens vs Sprouts



Microgreens are grown in soil (or a soiless medium like coir). Their stems and leaves are cut off to be enjoyed, leaving the seeds behind.



Sprouts are grown in water, and the seeds and roots are also eaten.

Growing Tips

- To discourage mold and dampening off, do not overwater. You want to keep the soil moist like a wrung out sponge, but not sitting in water.
- If mold/dampening off appears, try spraying a solution of water and 3% hydrogen peroxide. A common ratio is 10-15 ml of peroxide (available at drugstores) per 1 liter of water. This is gentle enough for most microgreens but strong enough to act on surface mold.

Ways to Enjoy!

Add microgreens to:

- Sandwiches
- Soups
- Smoothies
- Salads
- Pizza
- Your meal as a fun side



Invite students to bring their own sandwich and everyone harvests and adds microgreens to their sandwiches.



Additional resources

How to Grow and Harvest

- How to Grow Microgreens by Mumm's
- How to Grow Microgreens and Shoots with Niki Jabbour
- How to Harvest Shoots and Microgreens with Niki Jabbour
- How to Grow Microgreens by West Coast Seeds
- How to Grow Bramble Hill Farm Microgreens

Sourcing Seeds for Microgreens

For best results, source seeds that are sold specifically for growing microgreens as they have undergone testing for this use. Below are some suggestions:

- Mumm's Organic
- Halifax Seeds
- Vesey's Seeds
- West Coast Seeds



Activity

Grow Your Own Microgreens

Types of Microgreens to plant:

- Arugula
- Cabbage
- Basil
- Sunflowers
- Buckwheat
- Parsley
- Broccoli
- Peas

Materials Needed:

- Shallow plastic container with drainage holes (purchase these at garden centres, or use upcycle pre-packaged salad containers, fruit boxes, disposable pie plates, takeout containers, milk cartons, even seedling trays for a large batch)
- Larger container/large tray (to prevent mess)
- Potting soil (coconut coil mats are another option to try in place of soil)
- Seeds (see list below)
- Plastic wrap/ Plastic Greenhouse Dome
- Light/heat (window sill, grow light)
- Scissors
- Spray bottle

Instructions:

Preparation

- 1. Fill container with 2.5-5 cm of **pre-moistened potting mix soil** and press it down gently to create an even surface.
- 2. Sprinkle seeds evenly and densely over the soil and gently press them in. (If planting peas, soak them overnight first).
- 3. Cover the seeds with a fine layer of dry potting soil (⅓ cm).
- **4.** Put the container on a large tray to prevent a mess. Gently spray water over the newly planted seeds.
- 5. Cover the container with plastic wrap (or dome) and place it in a warm sunny location like a windowsill.

Note: The optimal temperature for germination and growth is 18-24 Celsius. The greens will need at least 4 hours of direct sunlight per day to thrive. Grow lights also work well.

Maintenance

- 6. Use a spray bottle to keep soil moist. Spray 1 or 2 times per day until growth appears (3 to 7 days).
- 7. When the first microgreen shoots emerge, remove the plastic cover and continue to moisten 1 to 2 times per day.

Harvest

- 8. The microgreens are most nutrient-rich when the first leaf (the cotyledon, or seed leaf) has fully developed. Harvest your greens by cutting them with scissors at the base of the stem.
- 9. Clean the greens with water and gently dry them. Enjoy!



Handout

Grow Your Own Microgreens

What you need to grow your microgreens

- Shallow container with holes (like a plastic cup or takeout container) OR a larger seedling tray to do a big batch
- Big tray to catch mess
- Soil

- Seeds
- Plastic wrap or dome
- Sunny spot
- Scissors
- Spray bottle

Let's start growing!



1. Fill your container with damp soil (about as deep as your finger) and smooth it over



- 2. Sprinkle seeds all over the top and press them in gently. (Soak peas overnight first!)
- **3. Add a thin layer** of dry soil to cover the seeds.



4. Place your container on a tray to catch any mess, then spray water on the seeds.



Cover with plastic and put it in a warm, sunny spot like a windowsill.



6. Spray your soil to keep it happy! Use a spray bottle to mist the soil once or twice each day. Keep spraying until little green sprouts start to grow — that might take 3 to 7 days.



7. Time to uncover! Once you see the first tiny green shoots popping up, gently take off the plastic cover. Keep spraying the soil every day to help your plants grow strong.



8. Look for baby leaves! When you see the first leaf fully open (called a "seed leaf" or cotyledon), your microgreens are ready to harvest. Ask an adult to help you cut them near the bottom of the stem with scissors.



9. Wash & dry, then dig in! Rinse your greens gently with water and pat them dry with a clean cloth or paper towel. Now they're fresh and ready to eat!

