



Seedling Starting (on a budget)

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Seedling Mix

- Choose Organic Seedling Mix - (bag size) - Will probably be about \$15
- Organic compost or worm castings 1 bag \$12
- Pro Mix is a good company





How to prepare

3 Parts Seedling Mix

1 Part Compost

Mix in a large bin - add water until it clumps but is not dripping when you squeeze the medium in your hands.

Filling Trays

- Seedling tray typically holds 72 starter cells - standard amount
- When potted up into the typical 3inch plastic pots, you end up with 4 trays of 18 (72 full grown seedlings)
- Not a big fan or paper or egg cartons dry out too fast
- Trays with holes vs trays without



Planting Seeds

- Label your trays first - name and date planted
- Use permanent marker or oil based marker
- Yogurt containers are a good recycled material
- Seeds do not need to be planted deep, usually no deeper than their diameter.
- Press a small dimple in soil, drop seed in, cover with soil





What to plant?

Depends entirely on your goals! Maybe you want to start a pollinator garden, or a pumpkin patch, or maybe a pizza garden – or maybe you want to grow greens for a salad bar program?

For seedling sales, popular items are:

- Tomato
- Peppers
- Squash
- Zucchini
- Lettuce
- Cucumber
- Flowers – although some require early planting, and unique substrate.



When to plant?

- Based on last frost typically
- Depends when you want to harvest – Note DTM
- Typically aim for late May – especially if you are thinking of a seedling sale.

Visit our Crop Planning Template for Support:

<https://farmtoschoolbc.ca/f2sbc-food-literacy-resources/>



How to plant – with students

Depends on age!

- If younger (Middle or Elementary age) – I recommend larger seeds, or perhaps having a trial planting day, in which they plant beans or peas, and observe seeds.

Prep:

- Prep the planting cells in advance – divide them among the students, in pairs works well
- Have students determine in advance which seeds they would like to plant
- Keep the amount of options low – 4 types maximum.
- Consider planting directly into 4 inch pots with younger children

Distribute the labels first

- Popsicle sticks work, but you must use a pencil – label each one
- Have them put their initials on the back so they can identify their plant



How to plant

Planting

- Have them first push a small depression into the center of the cell – back of pencil works well, no more than $\frac{1}{2}$ inch
- Have them place the labels in the cells before planting
- Then plant each one – and gently cover the hole with finger – no pressure needed.

Water immediately

- Determine a watering team – have them do it at the same time each day, I recommend morning, and the water again in the afternoon on Fridays.



Activities / Resources

<https://farmtoschoolbc.ca/food-literacy-resources/>

- Highly recommend measurement and observation practices, in which students engage regularly
- Also encourage experimentation in the off-season
- Feel fine with also just treating it a like a soft greening of your classroom!



Lights and Time

- Set timer to 16 hours a day
- Try to keep lights about 6 inches above plants at all times of their growth
- Rotate the trays once a week



Germination

- Seeds germinate at different rates, but in general most will sprout above the surface in 3 - 10 days. If you are not seeing anything by 2 weeks, then something may have gone wrong, or your seeds were poor.
- If I have a large amount of certain seeds (basil, kale, lettuce) I will often plant 2 just to be sure, then simply snip or pull one of them once it emerges.
- Keeping the soil wet during this time is important, as well keeping it warm.



Early Watering

- Big fan of these pump action sprayers, they do a really good job, especially in the early stages when a fine mist is what is needed so as not to disrupt the tiny seeds
- First watering should be heavy, upwards of 2 litres of water
- Followed by daily watering, of about 1 litre per (72 cell tray)
- Mark the sprayer for students
- Feel the weight of the tray
- Water heavily before weekends and place domes on if you have them.
- Consider a tarp underneath trays



JET



MIST SPRAYING



Over / Under-watering





Potting Up

- Most seedlings will be potted up from their starter cell to the larger seedling pot around 4 - 6 weeks. Squash should be directly planted in the larger pot as they grow fast and large.
- Don't recommend potting up after watering as the soil falls off the plant
- Prepare your 72 seedling cells for their new guests - label them!
- Make a small dent into the soil to mark out your spot for planting
- Gently squeeze back of small cell trays to pop out the seedling.
- Plant it so that the point of contact of the stem with the soil remains flush with its new home
- Lettuces can go straight into garden from here



Later Watering (Larger Pots)

- Less frequent watering, but more water used!
- Watering can is fine, or pour water out of spout gently
- Avoid contact with leaves of tomatoes, squash, zucchini, and pumpkin
- Most seedlings will remain in these pots for an additional 4-5 weeks before heading out to the garden.





Total Budget First Year

- Grow Station = \$140
- Starter Mix, Compost = \$30
- Seedling Trays and Seeds = \$60
- Watering Sprayer = \$15

Total Budget = \$250 (Rough Estimate)

Future Year Budgets = \$30 - \$50 (Estimate)

Seedling Sale

- A full grow station of 72 seedlings sold at \$3 per seedling can generate \$210 in sales (minus the inputs, which will be big in the first year).
- Selling all of them will almost make you break even, and cover the costs of the grow station and materials.
- Can take pre-orders, or set up at a special event, partnering with PAC or teacher parent day is also ideal





Thanks!

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