



Garden Lesson 1: Starting Seeds Indoors



SCIENCE

Question, Observe, Record, Identify, Monitor



MATHEMATICS

Measure, Model, Compare, Calculate



LANGUAGE ARTS

Comprehend, Read, Write, Describe



VISUAL ARTS

Design, Create, Draw



1.1 INTRODUCTION

Gardens provide a diverse, hands-on teaching environment. One of the benefits of gardening, whether at home or in a school setting, is the opportunity to foster a child's connection with their natural environment. Gardens also provide an engaging place to teach and practice healthy food choices.

Over the course of the Garden Lessons, we will walk young gardeners through the process of starting a garden from planting to harvest. **Lesson 1** will guide gardeners to create indoor seed starters using recycled egg cartons. Complete this activity between March and May.

1.2 START A GARDEN JOURNAL

- Starting with a blank notebook, write "My Garden Journal" or "[Your Name]'s Garden Journal" on either the front cover or the first page. Decorate the cover or first page any way you like. Get creative!
- Write the word "Seeds" at the top of the next blank page. The following activities will be completed on this page.
- Open a seed package and look at the seeds.
 - What do the seeds look like? Think about the colour, shape and size.
 - What do the seeds feel like? Think about the texture.
 - If using multiple seed varieties, do the different types of seeds share any characteristics with each other or are they very different?
- For each type of seed:
 - Draw a picture of the seed and a picture of what the seed will grow into.
 - Write a list of 3-4 characteristics of each seed, including any listed above (colour, shape, size, texture) or any others you can think of.
- Read the back of each seed package. For each type of seed, also write down:
 - How many days until a sprout should appear ("days to germination").
 - How many days until the vegetables can be harvested ("days to maturity").
- Using a calendar to count the days, determine the date you can harvest your vegetables by adding the number of "days to maturity" to your planting date (today).

1.2 MATERIALS:

- Seed package(s)
 - Beans, peppers, tomatoes and zucchini are good for beginners. For variety, choose two or three vegetables.
- Empty notebook
- Pencil or pen

OPTIONAL:

- Assorted craft supplies for notebook decoration

1.2 EXAMPLE:

	<p><u>Zucchini seeds are:</u></p> <ul style="list-style-type: none"> light brown smooth pointy on one end and round on the other 	<p><u>Days until sprout:</u> 7-14 days <u>Days until harvest:</u> 35-55 days <u>Planted on:</u> April 14 <u>Harvest between:</u> May 17 - June 6</p>
Zucchini		

TIPS AND TOOLS

Egg cartons make great seed starters! They are already divided into sections and easy to label.

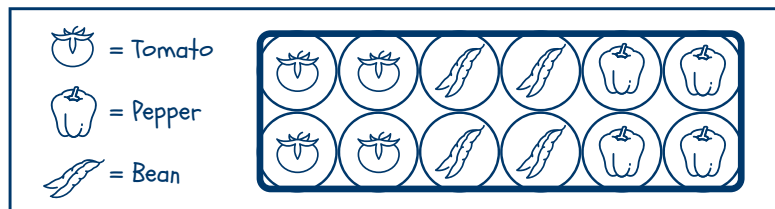
Some are biodegradable (paper, not foam or plastic) and can be buried directly in the soil with the seedling when it comes time to transplant.



1.3 PLANT SEEDS

- Carefully remove the lid from an egg carton with scissors. Poke a small hole in the bottom of each egg cup for water drainage. Keep the egg carton in a waterproof tray.
Optional: Mix some coffee grounds or compost with the soil. This will provide nutrients that will help the seeds grow.
- Fill the egg cups with soil and bury 1-2 seeds per cup. Try to have at least 2-4 cups for each type of seed. Check the back of each seed package to find out how deep to bury the seeds.
- On the "Seeds" page of the garden journal, draw a diagram of the egg carton and label where each seed is growing using words, numbers or drawings.

1.3 EXAMPLE:



- Water 1-2 times per day until the soil is moist but not soaked.
Optional: Use a spray bottle to water seeds evenly and prevent over-watering.
- Cover the egg carton loosely with a clear plastic covering to act as a mini-greenhouse. Remove the cover for an hour per day to allow air circulation and prevent mold growth.
- Keep the carton in a tray on a sunny windowsill. Try to find a window where the seeds will enjoy 6-8 hours of direct sunlight.

1.4 TRACK SPROUT GROWTH

- Write the word "Sprouts" at the top of the next blank page in the garden journal. The following activities will be completed on this page.
- For each plant, record the day that it sprouts (when the plant emerges from the soil). Dispose of the plastic covering once the first sprout appears to allow room to grow.
- Measure sprouts with a ruler or measuring tape twice per week, about every 3-4 days, and record the height of the plants as they grow.
- When the seedlings are 2-3 weeks old, they should be ready to transplant into larger individual pots. Refer to **Garden Lesson 2** for full instructions and activities. If planning to use recycled containers instead of plant pots (such as ice cream tubs, pop bottles or old toys), be sure to save them in advance.

1.4 EXAMPLE:

	Zucchini 1		Pepper 1		Pepper 2	
Sprout Date	April 23					
	Height	Date	Height	Date	Height	Date
	3 mm	April 27				
	7 mm	April 30				

1.3 MATERIALS:

- Scissors
- Egg carton
- Waterproof tray
 - Try using recycled containers, such as takeout containers, in place of a store-bought tray.
- Seed package(s)
- Potting soil
 - You can also use dirt from outside mixed with compost.
- Garden journal
- Clear plastic covering
 - ex. Cling wrap or a clear plastic bag.

OPTIONAL:

- Coffee grounds or compost
- Spray bottle for watering

1.4 MATERIALS:

- Garden journal
- Pencil or pen
- Ruler or measuring tape

TIPS AND TOOLS

When the seeds start to sprout, rotate the egg carton daily to give every sprout an even amount of sunlight.

Some seeds never sprout, and that's okay! There are many reasons why this can happen, so don't be discouraged if there are fewer successful sprouts than expected.

