

About the Garden Lessons

Over the course of the Garden Lessons, we will walk educators and young gardeners through the process of starting a garden from planning to harvest to putting the garden to bed for the winter. **Inside, you will find activity guides, curriculum connections, and tips and strategies for successful school gardening.** This hands-on series of Garden Lessons will support educators, youth leaders and students to start and tend to a garden project. These lessons were originally adapted from the Nova Scotia School Garden Resource Guide (2014).

This series is ideal for the integrated learning nature of Nova Scotia elementary curriculum; however, these activities can engage an all ages audience. Throughout the series that spans a full growing season, participants will keep a garden journal for planning, observation, and creative expression. Each student can have their own journal, or a group can keep one together.

Getting youth in the garden offers them opportunities to shape their food system, learn healthy food choices and connect with nature, all while building resiliency in a changing climate and having fun along the way.

Lesson Goals

- Engage in hands-on learning
- Gain food literacy skills
- Learn climate action connections
- Support emotional well-being and connection to the non-human world

Gardening and Climate Action

Look for these climate action icons in Grow Eat Learn resources to make connections between gardening and the climate!



Habitat Creation & Biodiversity



Waste Reduction & Circular Systems



Soil Stewardship



Water Stewardship



Food Security & Sovereignty

Adapting to climate change is critical for our food system. By engaging in the garden, students can learn about food production and its interdependence with plants, animals and weather.

Garden Lesson 1

Planning a Garden

Introduction

Complete this lesson between February and April.

Anyone can grow a garden! As long as the essential components are present (sun, water, soil, and nutrients), any garden space can be successful. This lesson outlines how to effectively plan and map out a garden and involves a visit to the garden site and tracking the growth of the garden in a journal.

1.1 Common Garden Types

Container gardens, ground plots and raised planter boxes are all effective ways to grow a garden, so it is up to the gardener to choose the best method for them and their site.

Pots

Benefits

- Mobile
- Less risk of weeds/pests/diseases
- Eco-friendly if using recycled containers
- Can be placed on any type of soil or surface

Drawbacks

- Soil dries out quickly
- Garden is limited by size/number of containers
- Expense of soil, amendments & pots



Plots

Benefits

- Better retention of water & nutrients
- Makes use of what is there & may be less expensive
- Can provide more space

Drawbacks

- Potential lack of nutrients in soil or contamination
- Risk of stepping on plants/compacting soil
- Potential risk of weeds/pests/diseases



Learning Connections

Science

Question, Observe, Plan, Investigate

Mathematics

Measure, Map, Estimate

Language Arts

Comprehend, Read, Write, Describe

Visual Arts

Design, Draw

Climate



Habitat Creation & Biodiversity



Soil Stewardship



Food Security & Sovereignty

Look for these climate action icons in Grow Eat Learn resources to make connections between gardening and the climate! See [Page 2](#) for details.

Planters



Benefits

- Less risk of stepping on plants & compacting soil
- Easier on the body, accessible design possibilities
- More space/depth for plants to grow, less rocks

Drawbacks

- Takes work to build planter boxes
- Expense of building materials/soil
- Difficult to move once in place

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 and use the first page to draw your dream garden with plants you'd like to grow and pollinators you might like to see. Get creative!

1.3 Research plant requirements

1. In your garden journal, write "Planting Map" at the top of the next blank page. The following activity will be completed on this page.
2. Research the space, soil and temperature needs of the plants that will be planted in the garden, using seed packages, online videos and books, etc. Find at least one native pollinator plant to add to your garden map.
3. Create a chart that includes:
 - a. What is being planted?
 - b. How much space is needed between each individual plant?
 - c. If planting in containers, what size container is needed?
 - d. Will the plant require support from a trellis?

1.3 Example

Vegetable	How much space between plants?	What size container?
Tomato	45-90 cm on all sides	60 cm deep and wide

1.4 Create a garden map

1. Measure your garden area from one end to the other (width, length). If using containers, how big is each container? If building a raised bed, what will the dimensions be?

Tips and Tools

Think outside the box! Beyond the three common garden types that we've listed, other possibilities could include edible landscaping with perennial plants and trees (for example, rhubarb, berry bushes and fruit trees) and pollinator gardens.

1.2 Materials:

- Blank Garden journal
- Pencil or pen
- Coloured pencils or crayons

1.4 Materials:

- Measuring Tape or meter stick to measure space

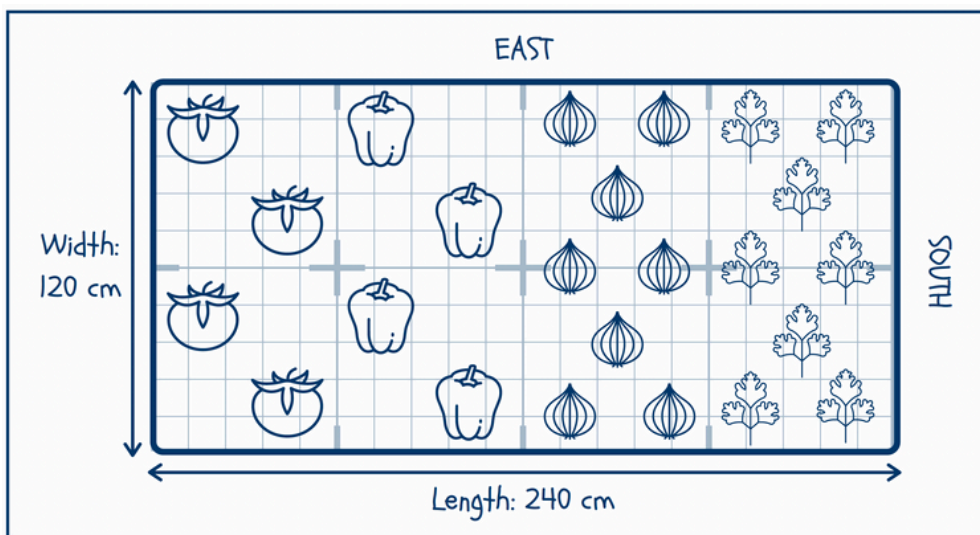
Optional:

- Seed packets
- Ruler or other straight edge for drawing grids/charts
- Graph paper
- Tape or glue

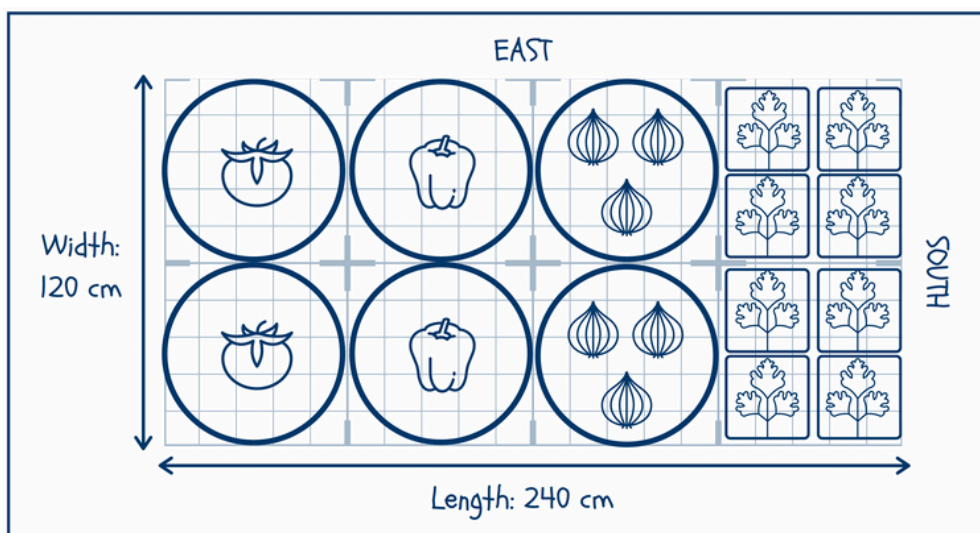
2. Draw a grid (see example below). Alternatively, tape or glue a small piece of graph paper into your journal.

3. Using these measurements and the space requirements for each plant, map the garden space. Indicate which direction each side of the garden is facing (i.e. east, west, north or south). If possible, plan to plant the tallest crops on the east or north side of the garden and shortest plants on the west or south side to maximize sunlight.

1.4.1 Example (In-ground plot or raised garden bed)



1.4.2 Example (Container Garden)



4. If you don't already have seeds to start that students have mapped out, make sure to have them ready for seeding day. Consider sourcing local seeds and have students research or share information about the benefits of local seeds, such as being already climate-adapted.

Tips and Tools

Garden location considerations:

- 6 hours of full sun
- Near a water supply
- Visible to community
- Protected from wind, wildlife, snow plows & other foot & vehicle traffic

Garden plant example:

Choose a favourite veggie-filled recipe (such as salsa) & plant a garden based on the ingredients. For a salsa garden, try planting peppers, tomatoes, onions & cilantro. See Activity 1.4 for an example of a salsa garden.

Incorporating pollinator plants:

Planting pollinator-friendly plants in and around your garden can bring beauty and provides a pollinator habitat in your garden. Have students research why pollination also boosts plant productivity.

Click for next lesson:

Garden Lesson 2: Starting Seeds