

Grow a Snack

Pillar: Healthy Eating

Division I

Grade: 1

Core Curriculum Connections: Science and Language Arts

I. Rationale: Vegetables are not always the most popular snack item amongst children. This lesson helps students learn to appreciate their vegetables by planting and growing their own healthy snack. *'Growing a Snack'* presents a great opportunity for discussing the importance of eating a variety of vegetables every day. Students have the opportunity to study, observe, and measure the growth of their *snack* infusing the pillar of healthy eating with the objectives in science class.

II. Activity Objectives: The students track and record the time it takes to produce a crop. They will develop the ability to observe carefully and record a sequence of events over a long period of time. This activity introduces students to the various patterns of seedling maturation and growth while reinforcing the development of essential scientific skills of observation and measurement.

III. Curriculum Outcomes: Science

Grade 1: Topic E: Needs of Animals and Plants

General Learner Expectations

Students will:

1–11 Describe some common living things, and identify needs of those living things.

Specific Learner Expectations

3. Identify ways in which living things are valued; eg; as sources of food
4. Classify some common local plants and animals into groups on the basis of visible characteristics;
7. Identify the requirements of plants to maintain life; i.e., air, light, suitable temperature, water, growing medium, space; and recognize that we must provide these for plants in our care.
8. Identify ways that land plants depend on soil.

IV. Materials and Preparation:

- Planting mix.
- Vegetable seeds: e.g. radish, lettuce, carrot, peas, bean, cabbage.
- Plant pots or growing flats.
- **Time Required:** One class period to set up. Five minutes per day for several weeks to observe. One day for conclusions.
- Student resource sheet for recording.

V. Background:

- Students will develop skills in observation and recording in this activity, these are essential skills on which all science depends. By having students work with different plant species, you can demonstrate how plants differ in rate of growth and maturation, how they supply different tissues for food and the way they vary in the relative development of different structures.

VI. Procedure:

- Preparation:
 - Obtain or prepare a planting mix that includes soil, peat and sand or perlite.
 - Fill the plant pots or flats with the mix.
 - Obtain seeds of several different vegetables.
 - Note: Radishes and lettuce will produce quick results; carrots, beets or beans all take several weeks to yield food. Cabbages and brussel sprouts need even longer. Most plants need cool temperatures and bright light to develop well.
- Explain to the class that they will be growing plants for food as a science project.
- Give each student 10 seeds of the vegetable they choose.
- Distribute the “Before my plant Grows” sheet and ask students to complete before they plant their seeds.
- Have students plant their seeds evenly over a plant pot and press them lightly into the soil, then sprinkle a layer of soil over the seeds and water the pot lightly.
- Pass out “As my Plant Grows” work sheet and explain how to use it.
- Over the next few weeks/months:
 - Students must check their plants daily and water them when the soil surface feels dry.
 - Continue the experiment until all students plants have produces something edible.
 - Have students record how many days it took for their plants to produce food and create a bar graph showing the different growing times.

VII. Discussion Questions:

- Why do we eat different parts of different plants?
- Where can we find out how long plants have to grow outside in our community?
- Why do we need to water plants?
- Name the four seasons and name a plant that grows in each of the different seasons.
- What food group from Canada’s Food Guide do our plants belong to? (Vegetable and Fruit)
- How many servings do we need each day from this food group? (5)

Before My Plant Grows

My name is: _____

Date I planted my seeds: _____

I planted: _____ seeds.
(type of vegetable)



I planted seeds that looked like this (draw the seeds):

I planted _____ seeds.
(number of seeds)

I covered my seeds with _____ mm of soil.

I think it will take _____ days until I have edible food on my plant.

As My Plant Grows

My name is: _____

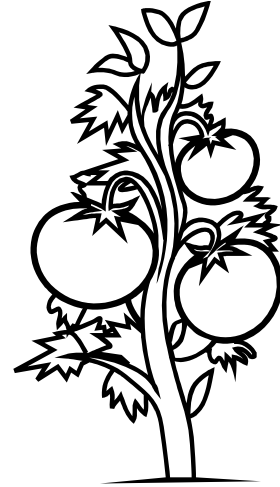
I watered my seeds every _____ until my plant appeared.

I water my plant every _____.

I first saw a plant _____ days after I planted my seeds.

My plant grew for _____ weeks until it had food I could

The _____ part of my plant became the food.



This is what my plant looked like when I could snack on its food (draw a picture of your plant):

Days from planting the seed until I could snack on my plant (make a tick each day you watch your plant grow):