



Grades K to 3: Science

Activity Plan: The Value and Importance of Plants

**SOUTH ASIAN CANADIAN
LEGACY PROJECT**



**SOUTH ASIAN
STUDIES INSTITUTE**
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Overview

Big question

Why are plants important?

Activity description

Through three mini-units, students will investigate the uses of various local and South Asian plants, learn how plants can be grown (including practices used locally and in South Asia), and learn how land is used for farming and food production. Students will integrate their learning from across three units into a final culminating project in which they design a farm.

Grades and curricular area(s)

- Kindergarten to Grade 3
- Science

Big ideas

Science	
Kindergarten	Plants have observable features.
Grade 1	Living things have features and behaviours that help them survive in their environment.
Grade 2	Living things have life cycles adapted to their environment.
Grade 3	Living things are diverse, can be grouped, and interact in their ecosystems.

Curricular competencies

Science	
Kindergarten	Demonstrate curiosity and a sense of wonder about the world
	Experience and interpret the local environment
	Represent observations and ideas by drawing charts and simple pictographs

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Grade 1	Demonstrate curiosity and a sense of wonder about the world
	Experience and interpret the local environment
	Sort and classify data and information using drawings, pictographs, and provided tables
Grade 2	Demonstrate curiosity and a sense of wonder about the world
	Experience and interpret the local environment
	Sort and classify data and information using drawings, pictographs and provided tables
Grade 3	Make observations about living and non-living things in the local environment
	Identify First Peoples perspectives and knowledge as sources of information
	Co-operatively design projects

Materials/Resources

Mini-Unit A: What Are Plants Useful For?

- Chart paper/whiteboard
- [Know Wonder Learn Chart](#)
- Images or physical examples of plants
- Books, videos, and other resources, such as:
 - [12 Powerful Ayurvedic Herbs and Spices with Health Benefits](#)
 - [Use of Plants for Kids](#) (video, 3:54)
 - [How Are Plants Helpful?](#) (Kelley Macaulay, 24 pp.)

Mini-Unit B: How Do Plants Grow?

- Chart paper
- Books and videos, such as:
 - [A Fruit Is a Suitcase for Seeds](#) (Jean Richards, 32 pp.)
 - [A Tree Is a Plant](#) (Clyde Robert Bulla, 40 pp.)
 - [Plant Life Cycle Stages from Seed to Fruit](#) (video, 5:21)
 - [How Does a Seed Become a Plant?](#) (video, 3:46)
- Anchor charts of various plants, including life cycles and plant parts

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- Seeds, soil, cups and so on for growing seedlings
- Journal

Mini-Unit C: How Is Land Used For Farming?

- Chart paper
- Venn diagram graphic organizer
- Common farming tools (e.g., hoes, spades) or images of them
- Farm picture for display (poster or digital)
- Books and videos, such as:
 - [Saffron](#) (video, 2:04)
 - [I Want to Be a Farmer](#) (video, 5:00)
 - [The Farm That Feeds Us: A Year in the Life of an Organic Farm](#) (Nancy Castaldo, 80 pp.)
 - [Look Inside a Farm](#) (Katie Daynes, 14 pp.)

Final Project: Design Your Farm

- Journal
- Grid paper
- Criteria, checklist or rubric

Kick Off and Connect

Mini-Unit A: What Are Plants Useful For?

Step 1

Ask students to discuss how they use plants in their lives (Think, Pair, Share). For example, how might plants help our bodies feel better when we're sick?

Step 2

Begin a chart listing what students Know, what they Wonder, and what they will Learn about plant uses as the unit progresses (KWL chart).

Mini-Unit B: How Do Plants Grow?

Step 1

Have a class discussion about gardens and growing plants. Ask guiding questions, such as:

- Who has a garden at home? Does your garden have food or flowers?
- What do you grow at home? Do you grow things inside (e.g., herbs) or outside?
- If you could grow one thing, what would you pick?

Optional: Visit or create a community or school garden and see what is being grown. If you don't have a local garden to visit, find images or videos of things that grow locally.

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Mini-Unit C: How Is Land Used for Farming?

Step 1

Display a picture of a farm. Ask guiding questions, such as:

- Who has been to a farm before? Does anyone in the class live on a farm (or know someone who does)?
- What happens on a farm?
- Why are farms important?

Step 2

Make a list of all the nouns (such as a barn, tractor) the students can see in the picture. The list may grow as the unit progresses.

Explore and Engage

Mini-Unit A: What Are Plants Useful For?

Step 1

Share a personal favourite plant and explain why you feel connected with it. For example, basil reminds you of the first time you gardened with your aunt, or a giant maple provides shade on hot summer days.

Have students draw, write or share about a favourite plant of their own.

Step 2

Make a list of commonly used South Asian plants and herbs. Do you recognize any of them as growing in your local community? In B.C.? In Canada?

Note: Students in Kindergarten and Grade 1 may need more support with this step. Consider printing out images of South Asian plants and herbs and asking if students are familiar with them.

Step 3

Guide a conversation about the uses of plants in Canadian, South Asian, and Indigenous cultures. If possible, invite an Elder or Indigenous community member to share stories and information.

Guiding questions may include:

- Are there any similar plants used by Indigenous groups and South Asian groups?
- Are they used for similar or different purposes?
- What connections can you make between the use of plants and how they are used in both cultures?
- What are some other uses of plants?

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Step 4

Discuss the ceremonial uses of plants. Have students research the South Asian plants holy basil, saffron, balsa, sacred fig, and neem.

Step 5

Add to the KWL chart from the introductory activity.

Mini-Unit B: How Do Plants Grow?

Step 1

Go on a nature walk around the school. Have students sketch a plant, shrub, or tree of their choice. Ensure there are details of the leaves, petals, ground, and so on.

Step 2

Share diagrams of plants and their parts (stem, roots, etc.); have students label their sketches from Step 1.

Optional: Plant a seed of a common South Asian plant variety and observe its growth over time. Discuss the life cycle of the plant as it goes through its stages.

Step 3

Find out if plants from other countries can grow here. What are some environmental factors that make some plants able or unable to grow here?

Mini-Unit C: How Is Land Used for Farming?

Step 1

Brainstorm what makes a good farm. Focus on farms that grow things, rather than farms with livestock.

Step 2

Choose one fruit or vegetable that is grown locally (e.g., blueberries, peaches, lettuce) and ask students to think about:

- What is needed for the land to grow that fruit or vegetable
- What happens if they don't grow
- What tools might be used to help with farming
- What things in nature (e.g., rainstorms) can help or hurt the plants

Wrap-up and Assess

Mini-Unit A: What Are Plants Useful For?

- What are some new things students learned about plant uses? Add this to the KWL chart.
- Can students share about a plant that is useful to them personally?

Mini-Unit B: How Do Plants Grow?

- Can students successfully label the parts of a plant?
- Can students successfully draw or talk about the life cycle of their plant?

Mini-Unit C: How Is Land Used for Farming?

- Can students describe at least one non-local farming method?
- Can students name some foods produced by local farms?
- What are some new words students learned? Add this to the farm picture.

Final Project: Design Your Farm

Now that students have completed the mini-units, have them:

1. Verbally describe their “dream” farm to a peer—each farm should have six plants, and at least one should be for non-edible purposes (e.g., medicinal or ceremonial)
2. Plan or draw their farm on grid paper—they need to include any buildings, water systems, tools, and garden plots in their design
3. Write/present a description of their farm design, including which plants were selected for farming (and why) and how their farm will be useful in the local community

Extend and Transform

- **Math extensions:** Have students calculate the area used in, and/or the cost to start and run, their dream farm; chart the growth of their plant; use fractions to show the division of their farms; count how many farm tools, plants, and so on would be on their farm.
- **Arts extensions:** Have students draw, paint or sculpt a plant of their choice; use plant dyes to make a gift for someone in their community (e.g., a tie-dyed napkin).
- **English Language Arts extensions:** Have students journal their learnings; write a fictional farming story; research and write an informative piece on a farming practice of their choice; debate which plant they believe to be the most useful.
- **ADST extensions:** Have students follow the design process for their dream farms (e.g., re-evaluate farm components after peer feedback).
- **Social Studies extensions:** Have students grow and donate a variety of plants to their community; have students gather information about plants used at their own homes; have students describe/make/bring their favourite plant-based dish to share in the class.

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- **Adaptations:** Students may orally tell, video capture, or illustrate their understanding of plants for many of the activities.
- **ELL:** Use the Picture Word Inductive Method (PWIM) for vocabulary growth with farming or plant pictures; have anchor charts about plant growth and parts displayed at all times; display key vocabulary.

Name: _____

Know Wonder Learn Chart

Know	Wonder	Learn