



GARDEN PATCH

SASKATOON FOOD BANK & LEARNING CENTRE

Connecting Saskatchewan Education outcomes to the Saskatoon community through teaching about food from soil to stomach

Pre-visit & Post-visit

Lesson Plans

How to use this booklet



1 Infograph

For the teacher to get acquainted with the organization of the Garden Patch. The infographic can be used to describe to students how the Garden Patch runs, before the field trip.

2 Summary

A reference point for the teacher to view how the Garden Patch field trip connects to the outcomes outlined in the Saskatchewan Education Curriculum. Additionally, the summary provides an explanation for each activity provided.

3 Lesson Plans

Activities are organized for each grade level to spark wonder and curiosity prior to visiting the Garden Patch. As well, reflections to consolidate the unit of study with a student's experience at the Garden Patch, post-visit.

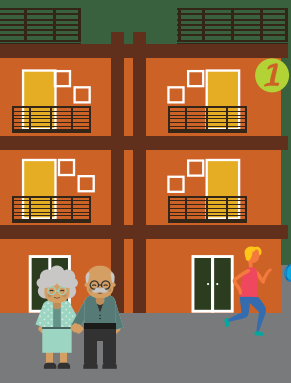
Note: please refer to the Educator Welcome Package for information regarding field trip preparation, expectations, and parent-information resources (i.e. letter home/what to pack for a field trip).



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Infographic



3. Sociology: Social Responsibility

The Saskatoon Food Bank & Learning Centre became a non-profit charity in 1984 with its location at St. Thomas Wesley United Church. Its present residence is on Avenue C South.

1. Sociology: Empirical Evidence of People

Who are the people we are serving? What are the needs of the community?

6. Earth Science: Garden Patch

The Saskatoon Food Bank & Learning Centre assumes responsibility of Potato Patch in 2012 and renames it the Garden Patch. Much work is needed to improve the soil.

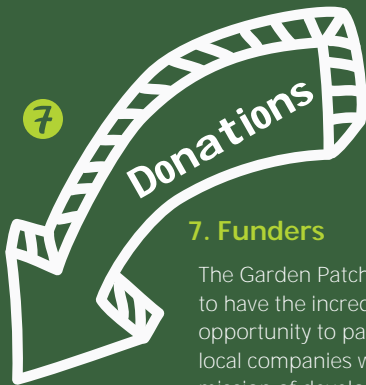
4. Biology: Emergency Food Hamper

The food bank recognized the important role fresh food has in a nutritious diet.

What foods are most often provided in the emergency hamper?



What does the body need to stay healthy?



7. Funders

The Garden Patch continues to have the incredible opportunity to partner with local companies who fund the mission of developing food security in Saskatoon, and helping Saskatonians grow their own food.



5. Community Garden

Nutritious food should not have to be sacrificed when a person has lack of money or is in crisis. Saskatoon Food Bank & Learning Centre partner's with the community garden, The Potato Patch in 2010

Garden Patch

How can we create a more livable community?



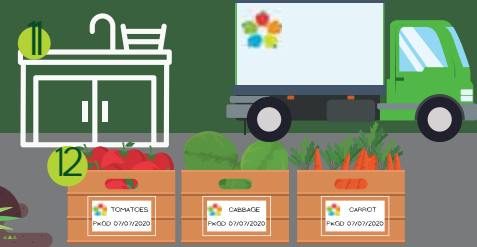
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9



10



12

8. Botany: Seeds

The Garden Patch receives donations of seeds, transplants, leaves (for mulch), and tools.

The Garden Patch cannot function without the help of its wonderful volunteers and the groups who care for the plots and manage tasks.

9. Ecology: Beneficial Insects

What role do insects play in the production of food? Why are bugs important to plants?

10. Botany: Maintenance

We care for plants by weeding the space around the plant and ensuring it is properly watered.

11. Harvest

We harvest the plants and wash them.

12. Preparation & Exchange

We organize the produce in boxes, label, and transfer to the SFBLC's pick-up truck to be brought to the SFBLC.

All living things are similar in that they need food, air, water, shelter, and space to survive (plants need light).

| |
|----------------|
| Social Studies |
| Science |
| Health |

Purpose of Field Trip

At the Saskatoon Food Bank & Learning Centre Garden Patch, students will be facilitated in tasks and activities that reinforce how the local community meets the needs and wants of its members; the basic needs of living things (including seeds); investigate properties of air, water, and soil; the interdependence between soil and living things; and basic decision making influenced by sustainable practices.



Provocation

Provocation is an activity that provokes a student's thoughts to wonder about the topic of study. After this activity students will be prepared to ponder and observe the following while at the Garden Patch:

Students will:

- Discover that most plants can't grow in the winter.
- Observe the misconception that plants die in winter (seeds are dormant).



Vocabulary Activity

The vocabulary activity prepares students to be familiar with the terminology used by the Garden Patch Facilitator, while on site.

Terms:

- Bacteria
- Sustainability
- Compost
- Soil
- Mulch
- Tools: trowel, garden gloves, hoe, soil cultivator



Query Activity

The query activity is a collaboration between students and teacher to create questions before and while at the Garden Patch, related to the unit of study. Submit questions to the Urban Agriculture Department at Saskatoon Food Bank & Learning Centre.

Q: How does the Food Bank provide food for people during the seasons?



Follow Up Activity

The follow-up activity is facilitating reflection of the field trip by requesting students to tie-up loose ends when connecting the topic of study with their personal experience of the field trip.

Grade 2 to Grade 3 Pre-visit Activities

Central Idea: All living things are similar in that they need food, air, water, shelter, and space to survive (plants need light).

The Science: Biology

- How do plants survive in different environments and why should I care?

The Science: Ecology

- How does soil show the properties of air and water?
- How does soil type influence water and air access for plants?
- How do plants use air, water, and soil?

The LEPTs of Science Education



Life Science



Physical Science



Earth & Space Science



Traditions

Earth Science

AW2.1

AW2.2

ES3.1

ES3.2

Social Studies

RW2.1

RW2.2

RW2.3

RW3.1

Provocation

COLLECT

- Laminated pictures of landscapes in the winter versus Laminated pictures of landscapes in the spring/summer/fall
- Dirt in small containers that has been lightly watered then placed in school freezer.
- Dirt in small containers

INSTRUCTIONS

This can be a large group display or a small group activity. Split class into table groups. It is preferred to initiate this activity at the beginning of the students' day, or after recess break. The purpose of this activity is to contrast plant growth with environmental conditions and spark wonder surrounding what conditions aid in healthy plant growth.

Print out enough copies of each photo to place at each table group. Each table group should have a frozen container of dirt and a container of room temperature dirt.

Allow students some time to discover, investigate, and compare the materials at their table without the prompting of the teacher. Take note of the wonders and questions that arise in their conversations. How do they refer to/communicate about the materials (prior-knowledge)? Bring together students and discuss what they observed. Write down questions and wonders for future reference.

Q: Are plants dead in the winter?

Q: Why don't plants grow in winter?

Q: How do we eat in the winter when most plants can't grow in our winter conditions?



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Grade 2 to Grade 3 Pre-visit Activities

Vocabulary

YOU DON'T NEED A FARM TO GROW FOOD!



COLLECT

- **Children's Book:** Farmer Will Allen and the Growing Table by Jacqueline Briggs Martin
- **Online Vocabulary Materials found at:**
<https://www.rif.org/literacy-central/book/farmer-will-allen-and-growing-table>
- **Get to Know Will Allen at:**
<https://grist.org/urban-agriculture/soil-survivor-an-interview-with-will-allen/>



OBJECTIVE

To explore words associated with food, healthy soil, and social responsibility. To determine how citizens meet the needs and want of their community members. To predict how the Garden Patch meets the needs and wants of Saskatoon community members.

VOCABULARY

Vegetable, Dirt, Garden, Farm, lima bean, green bean, tomato, soil, land, chemicals, pollution, composting, food waste, Red Wiggler worms, air, grow, plot, farmers, fresh, greens, agriculture.

PREPARATION

This activity is partnered well when students are provided an opportunity to grow their own bean plant. Buy different types of bean seeds (ask Canadian Tire if they have sTock from last year's seeds), and have students place their bean in a cup of dirt or between a damp paper towel (in a cup). Tell students that they are botanists, and their task is to study the structure and needs of plants to inform their school garden volunteers of what the school needs to grow healthy plants for that year!

INSTRUCTIONS

Step 1: Read the book or watch online via Youtube link:
<https://www.youtube.com/watch?v=XpwK4tCqhYY>

Before:

Ask students what they think the word farm means and to share their experiences with farms with their elbow-neighbor AND/OR ask students to predict what the author means by "growing table".



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Grade 2 to Grade 3 Pre-visit Activities

Vocabulary

YOU DON'T NEED A FARM TO GROW FOOD! (CONT)



INSTRUCTIONS

Before (con't):

This book is an incredible opportunity to explain why an author uses headings throughout the book:

- Headings are short words or phrases that usually appear at the top of a page. They let the reader know what the page, chapter, or section of text is about. Headings help to organize the information on the page. They're usually in large or bold type, so they're set apart from the rest of the words.

During

Ask students to be on the lookout for what Will Allen's farm looks like, and to look for clues to what a growing table is.

After:

Reference back to the students' prior conversation about farms and the meaning of the words "growing table":

- Were their predictions right?
- What does a farm look like to Will Allen, and is it the same meaning as what you thought a farm is?
- Can we grow food in the city? (refer to the Garden Patch).
- What problems were introduced when Will Allen was trying to farm in the city?
 - The plot of land had dirt that had chemicals and pollution in it so plants couldn't grow vegetables and fruits.
 - The Red Wiggler worms were dying from not being fed the right food scraps.
- What was the need that Will Allen saw in his community and the global community?
 - Garden fresh food should not be just reserved for those who can afford to buy it at the store. People can be taught how to grow their own nutrient-dense vegetables and fruit - even in the city. Refer to the Garden Patch, and how its mission is to grow food for individuals who cannot access vegetables and fruit, and along the way teach Saskatonians how to grow their food.

Writing: Have students predict using 3-4 sentences what they think the needs and wants of Saskatonians are and predict how the Garden Patch meets those needs.

Grade 2 to Grade 3 Pre-visit Activities

Query

WHAT WILL BE AT THE GARDEN PATCH?



COLLECT

- *Follow Up Activity* Document for each student. Document can be found below.
- *Nutritious Food & Healthy Body Documents*. Document can be found below.
- *Stages of Plant Growth* Document. Document can be found below.
- Clumps of Soil from school ground.
- Clear Beaker with water.
- (optional) DK Eyewitness Books: Human Body & Plants.

OBJECTIVE

Students will be placed in stations and engage with the materials presented. As they are investigating, they will think about questions/expectations they have for their field trip to the Garden Patch.

PREPERATION

Set up stations at tables that host bins displayed below.
Print a copy of the *Follow Up Activity* handout for each student.

INSTRUCTIONS

Assign students to tables. Provide groups at each table with 15 minutes to investigate their materials and follow the instructions below. After 15 minutes, students will rotate to the next station. Afterward, students will share wonders and curiosities with the teacher about what they are expecting to see at the Garden Patch and proceed to write down those expectations on their *Follow Up Activity* handout.

NUTRITIOUS FOOD & HEALTHY BODY BIN

Materials: *Nutritious Food & Healthy Body Documents* (below); (optional) DK Eyewitness Books: Human Body.

Print out food cards, human body pictures, and associated labels. Read over instructions provided.

The goal is for students to connect the relationship between nutritious food and our body. With each vegetable, fruit, meat, and seed we eat our body absorbs the nutrients it needs to maintain the health of the systems that keep our body functioning.

SOIL AIR BIN

Materials: clump of soil from different parts of the school yard; clear beaker or cup; water

Place clump of soil in a beaker filled with water. As the soil loses its shape, due to the replacement of air trapped in the soil. The water displaces the air; causing bubbles to rise. Trapped air within the soil helps living organisms survive in the soil.

STAGES OF PLANT GROWTH BIN

Materials: *Stages of Plant Growth Document* (below).

Print out plant growth cards along with associated labels.

Students will match the plant growth stage with the related scientific label. Have students share previous experiences with seeing plants at various stages of growth.



Grade 2 to Grade 3 Post-visit Activities

Essential Question: How can we create a more livable community?

Activity Goals:

- Acknowledge that healthy soil grows nutritious plants that make for nutritious foods.
- Explain how some Saskatonians do not have easy access to nutritious foods.
- Connect stewardship of the city soil with meeting the needs of Saskatonians.
- Develop a plan for teaching others what types of foods to give to the Saskatoon Food Bank & Learning Centre that help the body to stay healthy.

Learning Objectives:

*At the end of these activities, students will **recognize** that the relationship between healthy soil, healthy plants, and healthy bodies.*

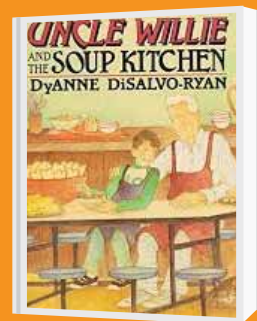
Take Action

Go to a nearby grocery store and investigate what items are placed in the SFBLC collection bins. Do these items come from plants or are they heavily processed? Would those items provide the minerals, vitamins, or macronutrients needed for the body to stay energized and healthy?

Have students create a pamphlet/poster to hand out to parents, classmates or the greater community that educates others about food choice and what food items to buy for the emergency hampers that will provide energy for the body to stay healthy.

Read

Uncle Willie and the Soup Kitchen
by DyAnne DiSalvo-Ryan



Watch on Youtube

<https://www.youtube.com/watch?v=p6xfFeOvymo>



Follow Up Activity

COLLECT

- *Follow-up Activity* Reflection Handout students completed prior to field trip
- Colouring pencils/markers

PREPERATION

Have students gather to the carpet or at their desks and run through the questions/wonders/expectations they had before their trip to the Garden Patch. Ask students to share if their expectations were correct or if any of their questions were answered.

INSTRUCTIONS

After the large group discussion, have students complete the remaining questions on the *Follow-up Activity* handout.



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Stages of Plant Growth Bin



Sprout

Seedling

Vegetative

Budding

Stages of Plant Growth Bin



Flowering

Ripening

Harvest

Transplant

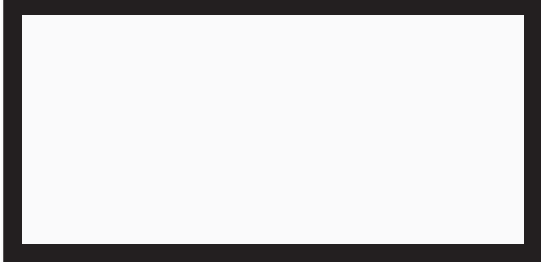
Instructions

Goal: to match the word with the picture.

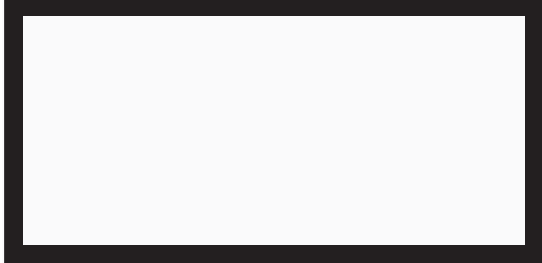
Step 1: Look at the human body. There are many wonderful systems in our body that keep us moving, thinking, and healthy! Find the matching word that describes the part of the body shown in the picture.

Step 2: Now that you have the parts of the body matched with its word, it is time to take a look at how our body behaves with the food we eat!

Look at the pictures of food and read how the food helps the body. Look for clues on the card to match the food picture with the part of the body it helps.

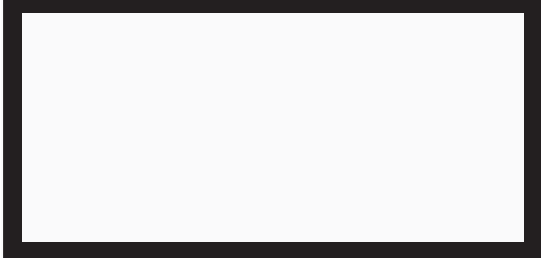
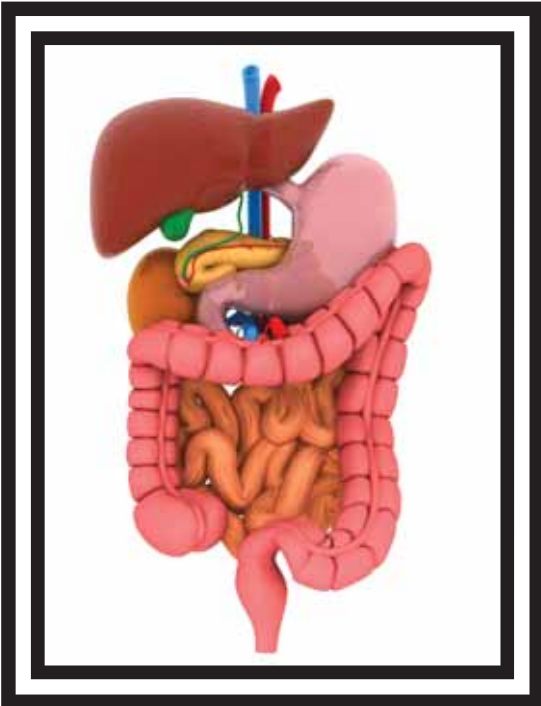


Muscle

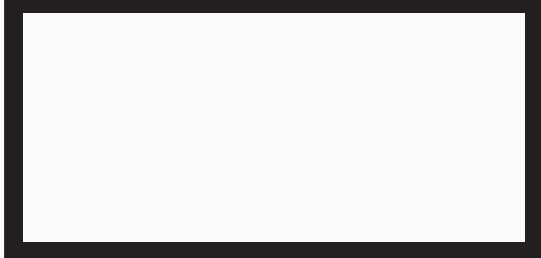


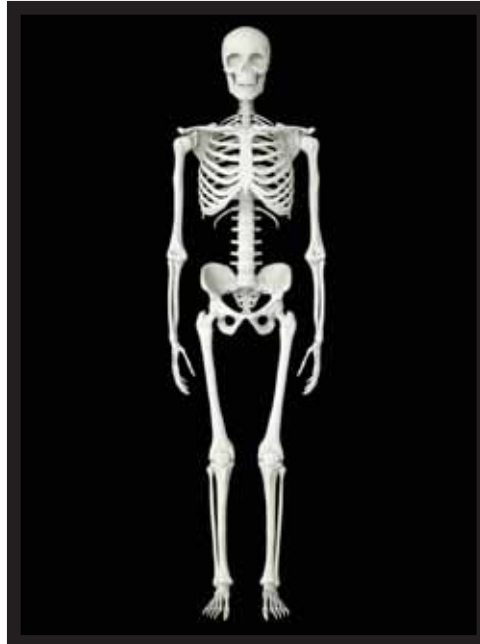
The Brain

**Digestive
System**



Heart & Blood





Skin

Skeleton

Carrot



Carrots are a source of vitamin A. Vitamin A helps keep your skin strong and maintains the tissue that make up your lungs and intestines.

Carrots come in many different colours! They can be purple, yellow, red, white, but most of us recognize carrots to be orange.

Apple



Apples are a source of pectin (pEK-tin). Pectin helps your digestive system by preventing constipation. Constipation is when your body has difficulty passing stool (poop!).

The skin of an apple is where the pectin is. The flesh of an apple (the inside of the apple) has vitamin C which helps your body fight off harmful infections and bacteria like the common cold and flu.

Cucumber



Cucumbers are a source of water and vitamin K. Vitamin K is very important for keeping your bones strong.

Vitamin K also helps your blood clot. Do you remember a time when you fell and scraped your knee or hand against the pavement? Most likely you damaged your skin which caused it to bleed. Your body helps start the process of healing the wound by creating a blood clot. Blood clots stop the bleeding.

Potato



Potatoes are great sources of potassium (P-oh-TA-see-um)! Potassium helps your heart and blood. Most of the potassium in a potato is found in the skin of the potato. Yes, you can eat the skin of a potato!

Did you know that the potato helps your brain, too! Potassium helps your blood get to your brain faster.

Fun fact: potatoes have more potassium than a banana

Eggs



Eggs, especially egg yolk (the yellow part of an egg), help your body by giving it vitamin B and protein. Both vitamin B and protein help your body build muscle and stay energized!

Almonds



Almonds are a source of magnesium (Mah-g-nee-see-um). Magnesium is a mineral that helps your body build strong bones.

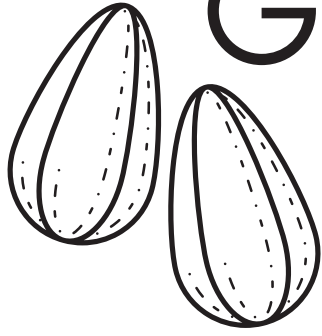
Almonds also have a great amount of calcium (K-al-see-um). Calcium is a mineral that your body uses to keep your bones and teeth strong.

Pumpkin Seeds

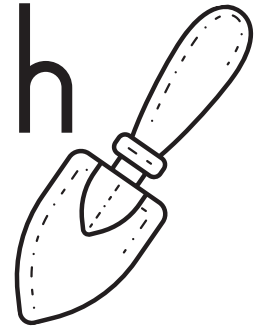


Pumpkin seeds help your body sleep and can help calm a headache. This is because pumpkin seeds have, what scientist call, an amino acid (Ah-me-no Ah-sid).

Your brain is in charge of signalling to your body when it is time to rest, sleep, or wake up. Your brain also needs lots of energy to help you think and play. Pumpkin seeds help provide your brain with what it needs to be alert when helping your body to stay healthy.



Garden Patch Follow Up



By:

Date:

Why are we going to the Garden Patch?

What do you expect to...

Handwriting practice lines consisting of a solid top line, a dashed middle line, and a solid bottom line, repeated five times.

Hear...

See...

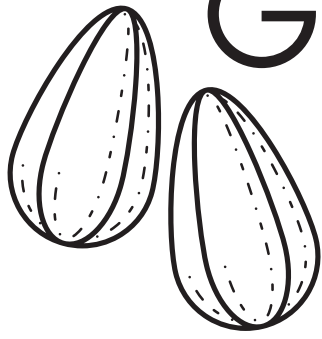
Learn...

What are three questions or wonders you have about the Garden Patch?

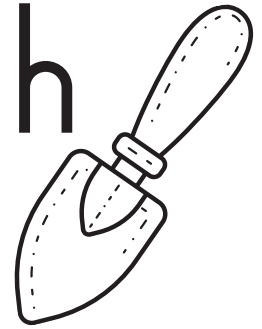
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Garden Patch Follow Up



By:

Date:

What was the best part about the Garden Patch?

Handwriting practice lines consisting of a solid top line, a dashed middle line, and a solid bottom line, repeated four times.

At the Garden Patch, I...

Heard...

Saw...

Learned...

Picture of my time at the Garden Patch