

GRADE 4 LEARNING EXPERIENCE

Food Waste: The Journey from Mother Earth to Table

Summary

In this engaging and thought provoking activity, students will be given an opportunity to learn about the journey food goes through before it gets to us, and why it is important to appreciate our food.

Objective

Students reflect on their connection to food, practicing mindful eating by enjoying food with all senses. Students also understand the environmental impacts of food waste. Students are introduced to **Netukulimk** (pronounced: *ne-du-gu-limk*)—the Mi'kmaw concept of respecting the natural world and not taking more resources than we need.

Pre-Activity

READING AND REFLECTION ON FOOD

DIRECTIONS

Students watch a video about how easily food can be wasted. Students then discuss what they learned from the video.

LINK [Short Life of a Strawberry \(01:44\)](https://www.youtube.com/watch?v=tKNhq8jLV_0)
www.youtube.com/watch?v=tKNhq8jLV_0

SAMPLE QUESTIONS FOR INQUIRY BASED LEARNING:

- What parts of this video surprised you?
- How will watching this video change how you think about the food in your fridge?
- What could the family do differently next time?
- Do you see food being wasted at school?
- How can students waste less food at school?

Students study the **Love Food Hate Waste Infographic (Appendix 1)** to learn more about the food waste that occurs in Canada.

TEACHER SUPPORT: 2.2 million tonnes is a big number. Here are a few examples to help students conceptualize it:

2 million small cars	Half a million elephants
10,000 blue whales	1,000 spaceships

(cont'd)

MAIN LEARNING OUTCOME

GRADE:

4

SUBJECTS:

English Language Arts



– Students will be able to communicate information and ideas effectively and clearly, and to respond personally and critically.

Social Studies



– Learners will investigate the relationships between humans and the physical environment.

SKILLS

Investigate – Ask/revise questions; Locate several relevant details to support an answer; organize and compare details; identify relationships and communicate findings.

Question – Generate broad questions that arise from simple to more complex problems and issues; Narrow and begin to revise questions, to create a question to investigate.

– Learners will investigate the stories of various explorers, incl. Acadians, African Nova Scotians, Gaels, Mi'kmaq, and additional cultures.

Science



– Learners will analyse inter-connectiveness of and within local habitats, inclusive of a Mi'kmaw perspective.

SKILLS

Analyse – Gather and select appropriate information; Begin to reflect on the appropriateness of the information; Communicate findings.

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READING AND REFLECTION ON FOOD (CONT'D)

DIRECTIONS

Students partner up to read the **Mi'kmaw Story** by Robert Bernard (**Appendix 2**).

ENGLISH LANGUAGE ARTS OPPORTUNITY — Students answer the following questions:

1. What key lessons did you learn from this story?
2. Why was it important for the Mi'kmaq to practice Netukulimk?
3. What things did they do to honour their relationships with the animals and land?
4. In what ways did they practice waste reduction?

TEACHER SUPPORT — To deepen learning on **Netukulimk** (*ne-du-gu-limk*)

"We view the world and all that is in it as having a spirit. We consider all life equal to our own and treat it with respect. We developed an intimate understanding of the relationships between the living and non-living so that each plant, animal, constellation, full moon, or red sky tells a story that guides our people so they can survive. These beliefs affect the manner in which we treat the natural world for sustenance and survival. Animals and plants are not taken if they are not needed. All spirits are acknowledged and respected as relatives and are offered tobacco, prayer, or ceremony (or combination) when taken. No part of an animal is wasted. All parts that cannot be used are returned to the Creator. The consciousness is described by the Mi'kmaw word, **Netukulimk**."

SOURCE **Mi'kmaq Ecological Knowledge: Moose in Unama'ki** (Page 4)
www.uinr.ca/wp-content/uploads/2014/05/Moose-MEK-web-1.pdf

Activity

CONNECTION TO FOOD

DIRECTIONS

Students are asked to close their eyes and consider the following, while it is read to them:

MI'KMAW PERSPECTIVE

The Mi'kmaq have a strong belief that everything around us has a spirit and therefore should be respected. This includes the food we eat, the materials we harvest from Mother Earth in order to have things like paper or pencils. Following this, we need to always treat everything around us with respect and express gratitude when we take anything from it.

"For countless generations, the First Nations and Inuit people have had unique, respectful and sacred ties to the land that sustained them. They do not claim ownership of the Earth, but rather, declare a sense of stewardship towards the land and all of its creatures. This sense of responsibility towards the land is more than a mental or even emotional obligation; it is tied intrinsically to Spirit. A strong communion with the spirit of all aspects of the Earth provides a unique perceptual lens through which all activities of daily life becomes an expression of Spirit."

SOURCE Learning with the Natural World (firstnationspedagogy.com/earth.html)

MATERIALS

Fruit, Paper,
Pencils/pens

Appendix 3
Mother Earth to
Table cards

DURATION

40 min

RESOURCE LINK

Mi'kmawey Debert
Education and
Outreach
1-877-892-2424,
ext. 271
www.mikmaweydebert.ca/home/

CONNECTION TO FOOD (CONT'D)

FROM MOTHER EARTH TO TABLE

INQUIRY BASED LEARNING OPPORTUNITY

Students eat a piece of fruit (e.g. apple, banana, orange, berries, cranberry) **(Make sure there are no allergies.)** Then, they describe it on paper, using all their senses: What does it taste /sound/ feel/ look/ smell like?

In groups of four to five, students brainstorm each step involved in the **"Journey of the Fruit"** from Mother Earth to Table. Sample questions:

*How did the apple become an apple? How long did it take to grow?
Did someone have to help it grow? How did Mother Earth help it grow?*

Project the **Mother Earth to Table Cards (Appendix 3)** on screen and assign each student (or group) a step in the journey. OR, print two to three copies of Appendix 3 and cut out the steps. Give each student (or group) a step to hold. (Note: There are 12 steps, so multiple students will have the same step.)

Ask students to organize themselves in a line to show the journey from "seed" to "eating" of the fruit. (If students are having difficulty, show the process of apple farming: thebeakerlife.com/journey-of-a-bite-apples-7fb3e26235c5)

OPTION Students can also learn about **food miles**—the distance that foods travel to reach the consumer. www.foodmiles.com/

Post-Activity

LETTER OF GRATITUDE

DIRECTIONS

Students draw a picture or write a thank you letter to any of the following: the farmer, the land, the seed, the water, the animals that fertilized the seed, the transportation, or the person who gave them the apple.

Their letters should include a promise or commitment to waste less food, and some ways they have learned to do that.

EXAMPLES Cut up bananas, or other pieces of fading fruit, to freeze for smoothies; Put extra meal portions in freezer to reheat later; Plan meals and snacks for the week so food is not forgotten.

Students can conduct a **web quest** to research how to help food last longer, and reduce waste.

LINKS "Keep it Fresh" lovefoodhatewaste.ca/keep-it-fresh/produce-guide/
Tips /info on food waste in Canada lovefoodhatewaste.ca/

Assessment

FORMATIVE Evaluate students by observation during brainstorm and letter writing portion, as well as how they show understanding of food travel process during main activity.

SUMMATIVE (OPTIONAL) Collect and evaluate students' letters.

MATERIALS

Paper, Pencils, Crayons

Internet access for web quest

DURATION

30 min

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Share on social media!
#NothingWasted

ABOUT DIVERT NS

Divert NS is a not-for-profit organization championing recycling in Nova Scotia. For over 20 years we've helped build a culture of recycling through environmental stewardship, education, and innovation.

Divert NS operates the Beverage Container Deposit-Refund Program and the Used Tire Management Program. In addition, we work in collaboration with government, industry, and academia to divert waste-resources from landfill.

Divert NS, in partnership with municipalities, delivers education and awareness programs to schools, businesses, and community groups. Divert NS also works to develop stewardship agreements and funds innovative research and development initiatives.

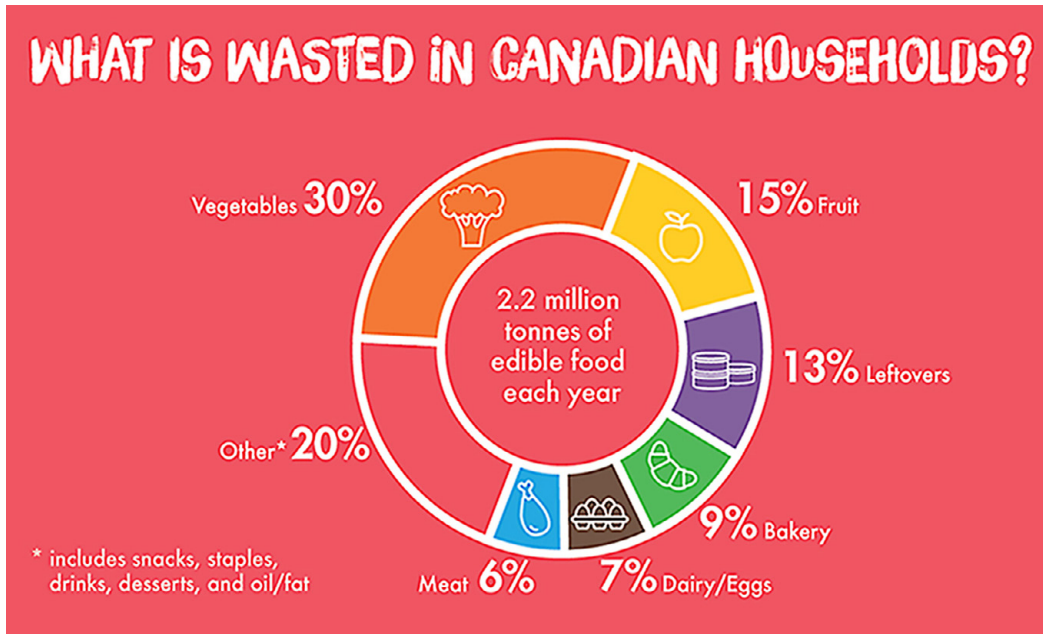


We welcome feedback from students and teachers on these lesson plans and resources. Please send your feedback to:

Toll-free
1.877.313.7732

info@divertns.ca

“Love Food Hate Waste” Infographic



Food Waste in Canada

One third of all food produced globally is wasted. Shocking, eh? The truth is that Canadians are throwing out more food than they realize – food that could, at one point, have been eaten.

Source: lovefoodhatewaste.ca/about/food-waste/ (downloaded 2019)

Love Food Hate Waste (Metro Vancouver)

Link to Video
vimeo.com/275737307

“Every tonne of household food waste that is avoided is the equivalent of taking one car off the road each year.”

Source: lovefoodhatewaste.ca/about/food-waste/

APPENDIX 2

FOOD WASTE: THE JOURNEY FROM MOTHER EARTH TO TABLE

A Story by Robert Bernard



The teacher begins by sharing with the students the story of a Mi'kmaw family set in the early 1300's, before the time of the arrival of Europeans, when only Mi'kmaw people occupied these lands they call Nova Scotia today. Back then and for the Mi'kmaw people today, the L'Nu (our traditional name as a people), the circle of life meant the process of respecting all components of the land, nature, animals, fish, plant life and abiding by the natural laws of the land, of Mother Earth.

Mother Earth would guide our path towards living a very traditional way of life, one that was filled with communicating between the relationships they provided us with spiritual thankfulness that is found in all living beings and plant life. It was about understanding and appreciating every little gift that was given to us as a people. It was about protecting the water, the environment and respecting how we harvested only what we needed to eat and not abusing or wasting what was offered to us by Mother Earth.

As part of the harvest the gatherers would say a small prayer of thanks to the animal, to the fish, to the plant or trees and thanking them for sharing their spirit and offering up their spirit to us for our survival.

This was called **Netukulimk**, [ne·du:gu·limk] which talked about the process of “only taking/using what you need” — the very earliest concepts of sustainability or having true respect of all the surroundings around you.

Families and individuals all knew about these important relationships, they knew that when they had to go harvest wood for their fires, they only took what they needed to stay warm. They only took enough so that they could cook their meals. And when they harvested animals and fish for their food, they always knew that if they took too much, that there may not be enough there when they came back again. The people knew about the natural laws of

respect for all of these relationships they had with the land, the animals, fish and plants. They knew that the plants were also their medicines and they all trusted in the traditional knowledge and ways of the elders and the knowledge keepers and medicine men that helped to protect them when they became sick.

And as the children got older they all knew that they had a place and role to play in the community so that they could all work as one, together with the land and animals, so that those relationships that had been in place since time immemorial meant survival, and that was always the key.

Each time they had to hunt, fish or collect resources for their daily livelihood activities (like make baskets or create tools, weapons for hunting or clothes for their warmth and protection) they knew that they had to use as much of the resources they had in order to eat, live a warm safe life together with their brothers and sisters and families.

This is a story of survival, a story of resilience and a story of relationships in the circle of life and a story of the importance of cultural knowledge. The lessons learned here are about utilizing as much of the local resources as possible and not to waste and throw away or overuse (another form of waste). These lessons are now needing to be applied in today's world and in today's society.

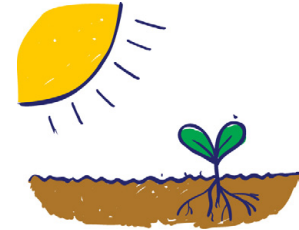
Mother Earth to Table Cards



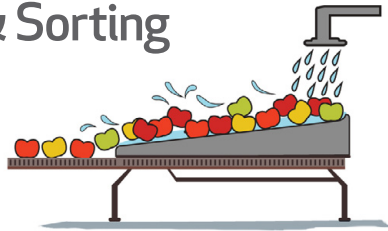
Harvesting



Seedling



Washing & Sorting



Home Storage



Eating



Tree



Pruning



Storage



Watering



Seed



Distribution



Transportation

