Grade 7 Science
Land Based Learning
Unit B: Plants for Food and Fibre

SCHOOL GARDEN STUDIO

CAA AMA

Introduction

"Two-Eyed Seeing" refers to learning to see from one eye with the strengths of Indigenous ways of knowing and from the other eye with the strengths of Western ways of knowing and to using both of these eyes together.
(Mikm'aw Elder, Albert Marshall)

Indigenized Instructional Practices are:

- Holistic
- Collaborative
- Relational

The four pillars of Indigenous Ways of Knowing:

- Storytelling
- Land Based Learning
- Leadership/Language
- Healing

(Elder, Consultant and Educator Donna Ross-Donna is Cree-Métis from Saskatchewan and member of the One Arrow First Nation, Treaty Six territory.)

The following task has been created with knowledge, consultation and guidance from Elder and Knowledge Keeper Phillomene Stevens, of the Îethka Stoney Nakoda Nation at Mînî Thnî, Alberta.

Teacher Notes

Instructional Design:

When approaching the specific Teacher Quality Standards regarding First Nations, Métis and Inuit learning, Alberta teachers are often perplexed as to their level of competency within these areas. It is important for teachers to consider both their pedagogical approach to learning as well as the content and resources being utilized to fully meet the standards. The following series of tasks utilizes a student-centered pedagogical approach along with authentic Indigenous created content to uncover the General Learner Outcomes from the Grade 7 Science Program of Studies and to satisfy the Teacher Quality Standards as set out by Alberta Education.

To fully honor the Indigenized Instructional Practices and the four pillars of Indigenous Ways of Knowing as shown above, this unit of study provides foundational knowledge for teachers and students to begin the process of building a relationship with a local plant relative, the land, and ideally, a local Elder or Knowledge Holder. To create a resource that focuses on one Indigenous communities' culture, language, knowledge and history would not truly reflect the rich diversity of Indigenous Peoples within Alberta. Therefore, multiple groups of Indigenous peoples are represented in this resource that share a common worldview. It is critical for teachers to understand the value of creating relationships with local Indigenous culture, language, knowledge and history.For example, the concept of "Learning from Place" allows us to recognize that one community of Indigenous peoples might have a use of a strawberry plant that differs from another community. It honors the local peoples to know the difference.

The following thinking tasks are designed utilizing instructional routines that challenge the traditional power dynamic in a classroom. Students will actively navigate their learning by participating in thinking tasks to generate meaning in an independent and collective manner while teachers are actively listening and observing student knowledge. There is a noticeable shift from "learning about" to "learning from". Students and teachers have the opportunity to focus on learning from the land, and Elder, a picture,or a peer.

These thinking tasks are designed to be highly inclusive. They follow a UDL (Universal Design for Learning) approach to learning. Possible levels of student achievement within the Grade 7 Science General Learner Outcomes are addressed with the Learning Map* and then supported with student-led** and Building Thinking Classrooms***style instructional routines. A teacher should consider their classroom population when observing the learning map prior to the task to ensure it represents the community of students within their classroom.

Both teachers and students have an ongoing opportunity to assess, reflect and report upon the learner outcomes by referring to the Learning Map provided throughout the learning and assessment cycle.

The teacher's role is to ask questions, listen to and observe the learning taking place while students participate in the learning tasks. The teacher can be responsive to the learning that is generated after the learning has taken place during consolidation/sharing times.

This pedagogical approach benefits all students by allowing opportunities for students to think critically and use metacognition to deepen learning. Students will develop skills that lead to agency over their learning. The students will reflect and think about their thinking and share their thoughts with the community.

This pedagogical approach benefits teachers by building the foundation for sound, sustainable instructional and assessment practices.

A teacher may find that many more General Learner Outcomes and Specific Learner Outcomes are being met through the use of these instructional routines if they are followed with fidelity.

As with any routine, it takes time for students and teachers to see and feel the benefits and the purpose of this novel instructional routine.

Each task begins with "Starting in a Good Way". The intention during this time is to get student's minds, bodies, hearts and spirits ready to learn.

As the graphic below shows, learning may be designed to follow one of two paths, by either initially "Weaving Knowledge" (using student's previously learned knowledge) or by "Gathering Knowledge" (providing students with new knowledge). Either way, students will experience prompts to process and generate shared knowledge through the thinking tasks provided.

The daily thinking tasks are designed to fit into a 40 to 60 minute block. The teacher can choose the length of the time required for each section of the learning to suit their schedule.

Elder and Knowledge Keeper Voice:

As educators working towards involving authentic Indigenous voices into our programming, it is important to remember three things.

1. **Engaging Elders and Knowledge Keepers/Holders**: Elder voice is critical for finding direction and incorporating knowledge into our programming. Our Elders work very hard to support their families within their local communities. While our Elders are eager to provide support to people outside of their local community, they do experience fatigue from their work. Be respectful of their time and ensure that

requests made are reasonable and specific. For example, asking an Elder to spend an entire day talking to multiple large groups of students about their experiences in Residential School can be exhausting. Asking an Elder to share knowledge about your local Indigenous communities' relationships with plants can be uplifting for them. Offering protocol and an honorarium, as per your school division's guidelines will demonstrate the willingness for a reciprocal relationship. Respectfully honoring and fostering an *ongoing* relationship demonstrates a commitment to the Truth and Reconciliation Calls to Action.

2. **Authentic Indigenous Resources:** Authentic Elder and Knowledge Keeper/Holder voice first is always preferable to utilizing online resources. With that, there can be barriers to fostering those relationships. If a teacher must use online resources it is important to ensure that the teacher is aware of the authenticity of the online resources. Who created and is sharing these resources? Does the resource reflect the beliefs, culture and knowledge of your *local* Indigenous Peoples? Does the purpose of the resource match the purpose of the intended learning?

3. **Place:** Alberta is a province with many Indigenous communities. It is critical that a teacher is aware of what group (s) of Indigenous Peoples makes the land they are on home. It is respectful to ensure that students are aware of the historical relationship the Indigenous Peoples have with the settler community on the land we all walk. When using text and digital resources, note who the author is and attempt to use resources that reflect the local Indigenous Peoples culture, language, knowledge, beliefs, and traditions. Being respectful to local Indigenous Peoples language culture, knowledge and tradition will ensure that pan-Indigenization does not take place.

Elder Guidance:
Elder Phillomene Stephens, of the Stoney Nakoda Nation eagerly supports her community at Mînî Thnî with her extensive knowledge and compassion. She works in her community schools and for school divisions near her community. When sharing her knowledge, Phillomene shares the Îethka language with pride. Her knowledge surrounding edible and medicinal plants is extensive.

Phillomene provided direction for possible local plants to include in this unit of study, and she spoke very enthusiastically about students learning to view plants and the land through the lens of **Relationship, Reciprocity**, **Respect** and **Gratitude**.

Her examples are as follows:

In the Stoney tradition, **“Relationship”** can be shown by knowing the Îethka name for a plant relative, and by knowing the history of the land we are on and acknowledging the ancestors who walked on the land before us.

In the Stoney tradition, **“Reciprocity”** can be shown by only taking what you need when harvesting and by leaving at least half for the insects, birds and animals.

In the Stoney tradition, **“Respect”** can be shown by using mindful harvesting practices; harvesting in a four year rotation, and sharing your harvest with others.

In the Stoney tradition, **“Gratitude”** with edible plants can be shown by giving thanks during feasts by sharing some of your feast with the animals. Elder Phillomene uses the term, ***“Isniyes”.*** It is the Îethka (Stoney) word expressing gratitude for what you have been given. It is roughly translated to, “as you share with me, I will share with you.”

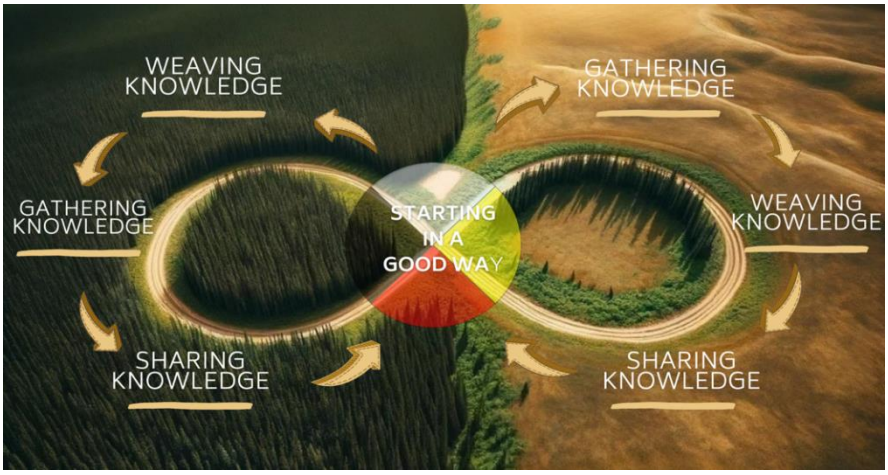
**It is important to acknowledge that this knowledge was shared by a Stoney Nakoda Elder. As teachers, we cannot assume that all Indigenous Peoples in Alberta have the same traditions, language, culture and knowledge. Each community has distinct traditions, languages, culture and traditions. As such, we must honor the traditions, languages, culture and traditions that exist within our local community.*

Focusing Question: How do we produce useful plant products? What techniques do we use, what knowledge are these techniques based on, and how do we apply these techniques in a sustainable way? Program of Studies
Students will: ● Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre. (Program of Studies) ● Student friendly language: I can show how people use living things for food and materials, and how this connects to our needs, tools, environment, and culture.

Learning Map

	Approaching	Essential	Developing	Confident	Extending
I know the basic needs of humans (food, clothing, shelter) for survival and how living things contribute to fulfilling these needs.	I know I need food to live.	I know basic human needs (food, clothing, shelter) for survival.	I know basic human needs for survival can be met using plant and animal products.	I know humans can thrive when they understand their relationship with plants and animals.	I know different groups of people use plants and animals in different ways to meet their needs.
I know of living things (plants and animals) and how they are used as sources of food and fiber (e.g., crops for food, cotton for fabric, sheep for wool).	I know plants and animals.	I know plants and animals are used for food.	I know plants and animals can be used for food, clothing and shelter.	I know human behavior can impact the availability of plants and animals for harvest.	I know relationships between plants, animals and humans can be respectful, reciprocal and sustainable.

Skills I can work with others to solve problems, and use the right words and formats to share my ideas, steps, and results.	I can tell or show another person what I am thinking.	I can listen to people within a small group.	I can listen to people within a group and share my ideas to solve a problem.	I can listen to people within a group and expand upon their ideas to solve a problem.	I can work within a group and share comparisons or connections to previous problems or knowledge.
Attitudes I understand that science changes and grows through the ideas of people from different backgrounds and perspectives.	I understand that people think.	I understand that people can have differing ideas.	I understand that science evolves when people ask questions.	I understand that science evolves when people ask questions and consider multiple sources as valid solutions.	I understand that I can evaluate and compare different scientific ideas and evidence, and that collaboration and testing help improve our knowledge over time



Graphic created by Dawn Granley using AI

Grade 7 Science
Unit B - Plants for Food and Fibre

Introductory Tasks - Plants for Food and Fibre

By using these tasks, previously learned knowledge can be assessed by reviewing the outcomes in the learning map (see above). This presents students with the opportunity to collaborate and notice that many pieces of art by Indigenous artists reflect a holistic relationship between people, plants and animals.

TASKS:

1. Starting In a Good Way (10-15 minutes)
    - Talking Circle- Prompt-What makes a relationship work well?
    - Pose the question and ask the student on the left to be the first to respond. The teacher may encounter student responses such as good listening, knowing things about one another, loyalty, trust, kindness, honesty, being helpful etc.
    - As the teacher is to respond last, summarize what students have shared and consolidate with what the teacher would like the students to know.
    - See link below for classroom talking circle guidelines.
    - Talking Circle Pedagogy

2. Weaving Knowledge (10-15 minutes)
    - Small group discussion.
    - In random groups of three, at vertical non-permanent surfaces (white boards), students will view pieces of art by Indigenous artists and respond by recording what they see in the image, what they think is happening in the image and what they wonder about the image.
    - See the links below for more information about the thinking task, random groupings and vertical non-permanent surfaces in the classroom.
    - Observe and listen to student thinking by visiting the small groups at the student whiteboards.

See-Think-Wonder Thinking Routine
Building Thinking Classrooms Practices

- Choose to print and distribute the art images below throughout the classroom for each group to view and respond to one image at their vertical

surface or display only one of the images digitally for all student groups to respond to.

Christi Belcourt-The Wisdom of the Universe
Christi Belcourt-Little Grandma
Nancy Desjarlais-Child of Nature
Norval Morriseau-Observations of the Astral World
Frank Polson -Cap Family II
Leah Marie Dorian-Lobstick Giveaway
Lance Cardinal-Sunset on Astotin Lake
Pam Callioux-Birds of A Feather
Kenojuak Ashevak- Animals of Land and Sea

The images above fall under the Fair Dealing Decision Tool for teachers as pieces of art that can be shown to students to learn from. Please ensure that you follow copyright rules and regulations.

3. Gathering Knowledge (10-15 minutes)
    - With the large group, consolidate and confirm or accentuate student generated knowledge by sharing the Indigenous worldview of interconnectedness.
    - Indigenous peoples believe that everything (people, objects and environment) is connected.
    - Read this quote to students.
    - "In some Native languages the term for plants translates to "those who take care of us."
      — Robin Wall Kimmerer, Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants
    - If time permits, show this short video. Relationship with the land

4. Sharing Knowledge (10-15 minutes)

- Display the learning map and allow students to reflect on what level of knowledge they possess.
- This is an opportunity for students to summarize their learning and is an opportunity for the teacher to listen to what students share.
- Return to the Talking circle-and prompt students to complete these sentence starters-I Used to Think, Now I Think
    - I Used to Think, Now I think Thinking Task

Relationship Tasks - Plants for Food and Fibre

TASKS:

1. Starting in a Good Way (10-15 minutes)
    - Storytelling- The Legend of Dandelion
    - The teacher is encouraged to read the story prior to telling it. Ensure the original story teller is acknowledged.

2. Weaving Knowledge (10-15 minutes)
    - Small group discussion.
    - In random groups of three, at vertical non-permanent surfaces (white boards) students will discuss and record their thinking.
    - Prompt: Teacher displays a variety of popular logos.Who do you have a relationship with? What are the benefits from this relationship? What are the shortcomings of this relationship? (PDF document attached)
    - The teacher will observe and listen to student thinking by visiting the small groups at the student whiteboards.
    - The teacher can consolidate with the large group what the common themes were in the small group discussions.
    - See the links below for more information about thinking tasks, random groupings and vertical non-permanent surfaces in the classroom.
    - Learn more about the positive impact of small group student-led discussions here.
    - Building Thinking Classrooms Practices

3. Gathering Knowledge (10-15 minutes)
    - Choice Board: Indigenous Worldview- Relationship
    - Edible Plants and Berries:High Bush Cranberries,Saskatoon Berries,Raspberries
    - Choice Boards require student access to an internet connected device to access the resources. Students work *independently* to complete the choice board.
    - Should students not have access to laptops or chromebooks, they could use their phones to access resources on the scan code version of the choice boards provided.

- Choice Boards are built to provide student choice while learning. Students choose one plant to get to know, one video to watch and one method to share their thinking.
- Learn more about the positive impact of providing choice boards to shift from transfer of information to student discovery here.
- How to create choice boards for students.

4. Sharing Knowledge (10-15 minutes)
    - Display the learning map from Teacher Notes and allow students to reflect on what level of knowledge they possess.
    - This is an opportunity for students to summarize their learning and is an opportunity for the teacher to listen to what students share.
    - Think/Pair/Share Prompt(s): Consider your responsibilities to this place. How can humans help or harm plant relatives? What decisions can you make each day to be a good relative to plants?

Reciprocity Tasks - Plants for Food and Fibre

TASKS:

1. Starting in a Good Way (10-15 minutes)
    - Talking Circle- Prompt: How did we (our families and ourselves) come to be in this place?
    - Pose the question and ask the student on the left to be the first to respond. The teacher may encounter many different student responses. As the teacher is to respond last, summarize what students have shared and consolidate with what the teacher would like the students to know. This is an excellent opportunity for the teacher to acknowledge the groups of Indigenous Peoples who walked the ***local*** land prior to and after colonization.
    - For more information about the First People(s) in Alberta click here.
    - See link below for classroom talking circle guidelines.
    - Talking Circle Pedagogy

2. Weaving Knowledge (10-15 minutes)
    - Story Telling Legend of Rat Root
    - The teacher is encouraged to read the story prior to telling it. Please ensure that the original story teller is acknowledged.

3. Gathering Knowledge (10-15 minutes)
    - Sit Spot Prompt: Pay attention to patterns. We learn from land by paying close attention to the patterns that exist**.**
    - A Sit Spot requires students to be outdoors. Students will require clothing to protect them from the weather. While some of our students may live in an urban setting and not have access to natural spaces, natural patterns are observable in urban settings. For example, students can observe the sky and clouds, how the wind and weather affects the trees, plants and animals and insects around them. A teacher is encouraged to support this activity throughout the seasons with students visiting the same sit spot to notice the changes occurring as a result of seasonal change.
    - Learn more about the positive impact of sit spots here.

4. Sharing Knowledge (10-15 minutes)
    - Talking circle: Prompt(s): While in your sit spot, what patterns did you notice? What relations do the plants in our location have? Who are the people who walked here before our families did?
    - See link below for classroom talking circle guidelines.
    - Talking Circle Pedagogy
    - Pose the question and ask the student on the left to be the first to respond. The teacher may encounter many different student responses. As the teacher is to respond last, summarize what students have shared and consolidate with what the teacher would like the students to know. Should the teacher find that students are not able to generate the relationships plants have, the teacher can consolidate by acknowledging the insects, the birds, the local fauna, the sun, the water etc. Reminding the students about the reciprocal relationship each one has with the plant relative. For example, birds, deer, rabbits, foxes etc. eat berries and then spread the seeds to other locations.

Reciprocity Tasks - Plants for Food and Fibre

TASKS:

1. Starting in a Good Way (10-15 minutes)

    - Talking circle: Prompt(s): What role does this local plant (teacher chosen local plant) play in this place? What is our role in this place? How are these roles related? How do we know?
    - Pose the question and ask the student on the left to be the first to respond. The teacher may encounter many different student responses. As the teacher is to respond last, summarize what students have shared and consolidate with what the teacher would like the students to know.
    - See link below for classroom talking circle guidelines.
    - Talking Circle Pedagogy

2. Gathering Knowledge (10-15 minutes)
    - Choice Board: Indigenous Worldview-Reciprocity
    - Edible Plants and Berries: Onion, Blueberry, Cattail
    - Choice Boards require student access to an internet connected device to access the resources. Students work *independently* to complete the choice board.
    - Should students not have access to laptops or chromebooks, they could use their phones to access resources on the scan code version of the choice boards provided.
    - Choice Boards are built to provide student choice while learning. Students choose one plant to get to know, one video to watch and one method to share their thinking.
    - Learn more about the positive impact of providing choice boards to shift from transfer of information to student discovery here
    - How to create choice boards for students.

3. Weaving Knowledge (10-15 minutes)
    - Small group discussions. In random groups of three, at vertical non-permanent surfaces (white boards) students will discuss and record their thinking.
    - Prompt(s): How do the plant's relations change? What new relations are the plants making as the land and water change?

- The teacher will observe and listen to student thinking by visiting the small groups at the student whiteboards.
- The teacher can consolidate with the large group what the common themes were in the small group discussions.
- See the links below for more information about thinking tasks, random groupings and vertical non-permanent surfaces in the classroom.
- Learn more about the positive impact of small group student-led discussions here.
- Building Thinking Classrooms Practices

4. Sharing Knowledge (10-15 minutes)
    - Display the learning map and allow students to reflect on what level of knowledge they possess.
    - This is an opportunity for students to summarize their learning and is an opportunity for the teacher to listen to what students share.
    - Think Pair Share Prompt(s): Some humans have made decisions that have made it harder to be in good relations with plants. What decisions can we make to nurture healthy relationships with plants? How does our community take care of our plant relatives?

Respect Tasks - Plants for Food and Fibre

TASKS:

1. Starting in a Good Way (10-15 minutes)
    - Talking circle-Prompt: How do we show respect?
    - See link below for classroom talking circle guidelines.
    - Talking Circle Pedagogy
    - Pose the question and ask the student on the left to be the first to respond. The teacher may encounter many different student responses. As the teacher is to respond last, summarize what students have shared and consolidate with what the teacher would like the students to know.

2. Gathering Knowledge (10-15 minutes)
    - Choice Board: Indigenous Worldview-Respect
    - Edible Plants and Berries:Strawberries, Beaked Hazelnuts, Wild Spinach
    - Choice Boards require student access to an internet connected device to access the resources. Students work *independently* to complete the choice board.
    - Should students not have access to laptops or chromebooks, they could use their phones to access resources on the scan code version of the choice boards provided.
    - Choice Boards are built to provide student choice while learning. Students choose one plant to get to know, one video to watch and one method to share their thinking.
    - Learn more about the positive impact of providing choice boards to shift from transfer of information to student discovery here
    - How to create choice boards for students.

3. Weaving Knowledge (10-15 minutes)
    - Small group discussions. In random groups of three, at vertical non-permanent surfaces (white boards) students will discuss and record their thinking.
    - Prompt (s): Choose one plant from your choice board-What gifts does this plant offer? And what gifts can we offer in return?
    - Prompt(s): How do the plant's relations change? What new relations are the plants making as the land and water change?

- The teacher will observe and listen to student thinking by visiting the small groups at the student whiteboards.
- The teacher can consolidate with the large group what the common themes were in the small group discussions.
- See the links below for more information about thinking tasks, random groupings and vertical non-permanent surfaces in the classroom.
- Learn more about the positive impact of small group student-led discussions here.
- Building Thinking Classrooms Practices

4. Sharing Knowledge (10-15 minutes)
    - Concentric Circles: The group forms two circles, one inside the other. Each student on the inside is paired with a student on the outside, and they face each other. The students discuss a question for a set amount of time, and then the inner circle rotates so the students have discussions with new partners.
    - Prompt -I Used to Think, Now I Think
        - I Used to Think, Now I think Thinking Task

Gratitude Tasks - Plants for Food and Fibre

TASKS:

1. Starting in a good way (10-15 minutes)
    - Storytelling-Legend of Willow
    - The teacher is encouraged to read the story prior to telling it. Please ensure the original story teller is acknowledged.

2. Gathering Knowledge (10-15 minutes)
    - Choice Board: Indigenous Worldview-Gratitude
    - Edible Plants and Berries:Bog/Low Bush Cranberries, Huckleberry, Ostrich Fern
    - Choice Boards require student access to an internet connected device to access the resources. Students work *independently* to complete the choice board.
    - Should students not have access to laptops or chromebooks, they could use their phones to access resources on the scan code version of the choice boards provided.
    - Choice Boards are built to provide student choice while learning. Students choose one plant to get to know, one video to watch and one method to share their thinking.
    - Learn more about the positive impact of providing choice boards to shift from transfer of information to student discovery here.
    - How to create choice boards for students.

3. Weaving Knowledge (10-15 minutes)
    - Small group discussions. In random groups of three, at vertical non-permanent surfaces (white boards) students will discuss and record their thinking.
    - Prompt(s)Take the perspective of plants. What might plants be feeling in different seasons and how does this explain the way they act across time?**
    - The teacher will observe and listen to student thinking by visiting the small groups at the student whiteboards.
    - The teacher can consolidate with the large group what the common themes were in the small group discussions.
    - See the links below for more information about thinking tasks, random groupings and vertical non-permanent surfaces in the classroom.

- Learn more about the positive impact of small group student-led discussions here.
- Building Thinking Classrooms Practices

4. Sharing Knowledge (10-15 minutes)
    - Display the learning map and allow students to reflect on what level of knowledge they possess.
    - This is an opportunity for students to summarize their learning and is an opportunity for the teacher to listen to what students share.

Seasonal Harvesting in a Good Way Tasks - Plants for Food and Fibre

TASKS:

1. Starting in a good way (10-15 minutes)
    - Talking Circle- Prompt: How does knowing about natural edible plants and berries help us? What can we do with this knowledge?
    - See link below for classroom talking circle guidelines.
    - Talking Circle Pedagogy
    - Pose the question and ask the student on the left to be the first to respond. The teacher may encounter many different student responses. As the teacher is to respond last, summarize what students have shared and consolidate with what the teacher would like the students to know. This is an opportunity for the teacher to consolidate their own personal knowledge of using traditional methods for harvesting, eating and preserving edible plants and berries (ie picking berries, making jams/jellies etc.)

2. Gathering Knowledge (10-15 minutes)
    - View the following video as a large group.
    - Frog Moon

3. Weaving Knowledge (10-15 minutes)
    - Small group discussions. In random groups of three, at vertical non-permanent surfaces (white boards) students will discuss and record their thinking.
    - Prompt(s) In the Frog Moon video, how did the Knowledge Holder know the Birch Water would be ready to harvest? How did the Knowledge Holder show a relationship with the Birch Tree? How did the Knowledge Holder display respect for the Birch Tree? How do you know the Knowledge Holder was respectful towards the Birch Tree? What did the Knowledge Holder do to show Gratitude towards the Birch Tree? What teachings did the Knowledge Holder share?
    - The teacher will observe and listen to student thinking by visiting the small groups at the student whiteboards.
    - The teacher can consolidate with the large group what the common themes were in the small group discussions.
    - See the links below for more information about thinking tasks, random groupings and vertical non-permanent surfaces in the classroom.

- Learn more about the positive impact of small group student-led discussions here.
- Building Thinking Classrooms Practices

4. Sharing Knowledge (10-15 minutes)
    - Concentric Circles: The group forms two circles, one inside the other. Each student on the inside is paired with a student on the outside, and they face each other. The students discuss a question for a set amount of time, and then the inner circle rotates so the students have discussions with new partners.
    - Prompt: Share one way that you would like to further your knowledge of Edible Plants and Berries.
    - This is an important time for a teacher to listen to student discussions as it will guide next steps.

Further Possibilities for Consolidating Knowledge:

1. Choose a *local* plant relative and strengthen your relationship. See attached PDF. Utilize the learning map to assess student's growth.
2. Invite a *local* Elder/Knowledge Keeper into your school/ classroom to talk about local seasonal knowledge and practices for harvesting local edible plants and berries.
3. Go out on the land with a *local* Elder/Knowledge Keeper and harvest edible plants and berries.
4. Ask a *local* Elder/Knowledge Keeper about the teachings for preserving or preparing your harvested plants and berries.
5. Explore online resources such as Traditional Canning and Preserving with the class and choose a recipe to follow.
6. Go on a nature walk/ scavenger hunt looking for specific local edible plants and berries.
7. Go for a walk and talk, and connect seasonal changes in the landscape.*
8. Plant a garden – either indoors or outdoors.*
9. Walk to the local cemetery – cemeteries are full of stories and histories of the people who walked before us.*
10. Examine the stories of your neighbourhood. Who are the parks named after, and why? What are the street names, river names, and how did people get around in past years?*

11. Cook and then eat together. Science and math can both be taught through cooking and baking.*
12. Invite local seniors to come in and compare jelly recipes. You are building relationships.
13. Go to the river, pond, or lake in your area. Take water and plant samples. Listen to the sounds around you and write a poem.*
14. Go geocaching with compasses or other devices. Land treasure hunts are a great way to engage students and bring play into learning.*
    *Resource
    **Prompt source

Additional Reliable Online Resources:

- College of Alberta School Superintendents Guide to Relationships and Learning with the Indigenous Peoples of Alberta. This is an extensive resource.
- Rupertsland Institute Resource with Métis Knowledge Holder, Krista Leddy Visiting The Land
- Infusing Indigenous Knowledge Into Curriculum. Includes each Grade Level and curricular connections to the seasons. Is from a Cree knowledge perspective..
- Empowering the Spirit.
- Tanya McCallum's Land Based Learning on Facebook.
- Traditional Plants- Youth from the Métis Nation of Alberta.
- Place-Based learning.
- Scouts Canada Indigenous Plant Guide
- Seasonal Activities to support land-based learning.
- Teacher Quality Standards

*Learning Maps are based on the work of Shelley Moore PhD. For more information, click on this link.
** To learn more about Student-Led learning, click on this link.
*** To learn more about Building Thinking Classrooms click on this link.

Suggested print resources for teachers and schools:

Teaching Where You Are- Weaving Indigenous and Slow Principles and Pedagogies, Shannon Leddy and Lorrie Miller

Wayi Wah!- Indigenous Pedagogies- An Act for Reconciliation and Anti-Racist Education