

Our West Coast Forest: Grade 4 Unit Plan Overview

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RIVER MONSTER Salmon running near Canada's Great Bear Rainforest. © Ian McAllister/Pacific Wild

Introduction

This unit will focus on grade 4 curriculum and introduce students to multiple curricular components including, but not limited to; Science, English Language Arts, Social Studies, and local Indigenous cultures and their traditional ecological knowledge. The main focus of this unit is to teach students about the interconnectedness of our local ecosystem by examining black bear, salmon, eagle, and cedar trees. This focus will be taught through the lens of seasonality and how each of these species responds and adapts to the earth position around the sun.

Ideally, this unit would take place over the course of the entire year, revisiting these lessons as the seasons change. This way students learn about animals and seasonality as they experience these changes for themselves, making the content more relevant to their lives. By introducing these topics throughout the year, students are also learning through Indigenous pedagogy, focusing on place-based learning and creating connections with the land they live and learn on.

Indigenous community members will help to ensure these teachings are appropriate and that students understand that many of these lessons being taught have been held by the local indigenous peoples since time immemorial. It is important the teacher remains flexible with this lesson plan and that they alter and adjust their lessons to best meet the needs of the students within the classroom.

Curricular Connections

Big Ideas: All living things sense and respond to their environment; The motions of Earth and the moon cause observable patterns that affect living and non-living systems

Curricular Competencies

- Observe objects and events in familiar contexts
- Make predictions based on prior knowledge
- Demonstrate curiosity about the natural world
- Experience and interpret the local environment
- Identify First Peoples perspectives and knowledge as sources of information
- Express and reflect on personal or shared experiences of place
- Identify some simple environmental implications of their and others' actions
- Transfer and apply learning to new situations
- Generate and introduce new or refined ideas when problem solving

Curricular Content

- Sensing and Responding: Humans, Other Animals and Plants
- Biomes as large regions with similar environmental features
- Local changes caused by Earth's axis, rotation, and orbit
- The effects of the relative positions of the sun, moon, and Earth including local First Peoples perspectives

Cross-Curricular Connections

Social Studies 4:

- Interactions between First Peoples and Europeans lead to conflict and cooperation, which continues to shape Canada's identity.
- The pursuit of valuable natural resources has played a key role in changing the land, people, and communities of Canada.
- Physiographic features and natural resources of Canada

English Language Arts 4:

- Exploring stories and other texts helps us understand ourselves and make connections to others and to the world.
- Access and integrate information and ideas from a variety of sources and from prior knowledge to build understanding

Physical Health Education 4:

- Participate daily in physical activity at moderate to vigorous intensity levels

First Peoples Principles of Learning

- Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits, and the ancestors.
- Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place).
- Learning recognizes the role of indigenous knowledge
- Learning is embedded in memory, history, and story
- Learning involves patience and time

Assessment

Throughout this unit, students will be completing various activities and answering questions within an interactive student notebook (ISN). This will be completed and handed in by each student throughout the unit and for a final summative assessment at unit completion. The teacher will assess the students work through this means based on completion, thoughtful responses and effort. Teachers should also make an effort to co-create certain aspects of the ISN with their students in the class to offer student autonomy and provide them with voice and choice. Students will periodically complete self-assessments within their ISN and hand them in to the teacher for feedback throughout the course of the unit.

Students will also be given the opportunity to express their learning and understanding through multiple modalities, including writing, drawing, discussion and dramatic performances. As we do not yet know our students, it is important to remain flexible with the assessment strategies and tools included in this unit. It is essential the teacher adapts their teachings to respond to the needs of the students, individually and as a class.

Unit Plan Overview

Lesson 1 INTRO Exploring a Forest

Objective: Introduce forests as a type of biomes. Spark interest in learning about our local forest as well as use the body's senses to investigate characteristics of a forest.

Activity: Students will move throughout centres to discover the theme of our science unit. Each centre will have artefacts associated with our local forest that give clues to the overall theme. Students will have to use their senses - sound, sight, touch, and smell - to identify each artefact and put the clues together to guess their commonality.

Assessment: Students will complete reflection questions within their interactive student notebooks.

Curricular Integration: Biomes as large regions with similar environmental features; sensing and responding: human's five-senses; demonstrate curiosity about the natural world; Experience and interpret the local environment

Resources:

[Video] Great Bear Rainforest IMAX Trailer: www.youtube.com/watch?v=BhU7JW086fg

Lesson 2 Forest Stories

Objective: To foster student interest in the four species we will be investigating (black bear, eagle, salmon and cedar tree) and give all students background knowledge on them.

Activity: Students will listen to stories about each of the 4 species we will cover during this unit. Each story will be factually-based and present ideas that are connected with unit outcomes.

Assessment: In their ISN, students will write down one fact they learned about each species as well as two or more questions they still have.

Curricular Integration: All living things sense and respond to their environment.; Demonstrate curiosity about the natural world; Make predictions based on prior knowledge

ELA: stories help us understand ourselves and make connections to others and to the world; First Peoples stories were created to explain the landscape, the seasons, and local events.

Resources:

Forest Stories Example:

https://www.hctfeducation.ca/wp-content/uploads/2014/09/ForestStories_Lesson_Updated.pdf

Lesson 3

Nature Walk with an Indigenous Elder

Objective: Learn about traditional ecological knowledge from a local indigenous elder.

Activity: Students will be guided through a nature walk learning about indigenous perspective, history, and our connection to the land, animals, and spirit. Students will be encouraged to create questions to act the elder during the walk that pertain to the forest and how Indigenous peoples connect with it

Assessment: Students will draw a picture or write one key take away they learned from the walk into their ISN.

Curricular Integration: Identify First Peoples perspectives and knowledge as sources of information; Express and reflect on personal or shared experiences of place; Demonstrate curiosity about the natural world; Experience and interpret the local environment

Lesson 4

What Causes Seasons?

Objective: Learn about the tilt of the Earth throughout the year and how that leads to the change in seasons.

Activity: Demonstration on how Earth rotates away from the sun in winter with Earth Ball and lamp. (Example in *The Shortest Day* book). After the demonstration, students will create a model of how the earth tilts and how that affects the angle the sun hits the planet which leads to changes in seasons.

Assessment: Students draw a model of the earth's tilt with regards to the sun and what season that corresponds with inside their ISNs.

Curricular Integration: local changes caused by Earth's axis, rotation, and orbit

Resources:

What Causes Winter Lesson Plan:

<https://www.hctfeducation.ca/wp-content/uploads/2016/08/Lesson-What-Causes-Winter.pdf>

[Video] Why Are There Seasons? <https://www.youtube.com/watch?v=UQjT5uKp2hg>

Lesson 5

Species in Spring I

Objective: Demonstrate the position of the earth during this season and increase student's awareness of the interconnectedness of an ecosystem by examining the activities of the unit's four key species

Activity: Students will be divided into groups and will rotate around the classroom visiting Science Learning Centers. Each centre will focus on how each species responds to its environment during spring.

1. Earth's Rotation Center: students will use the diagrams they made in Lesson 4 to determine where the earth is during spring.
2. Cedar Center: students will watch the video on how the First People harvest cedar bark in May. After the video, they will be first asked how they believe new cedar trees are made and then learn about how cedar trees use pollen cones to propagate the next generation of cedar trees.
3. Black Bear Center: After a long winter, black bears spend spring searching for food. Using pictures of different plants and animals, students will guess black bears' food.
4. Salmon Center: In this centre, students will learn the transition salmon undergo as they move from their spawning beds to the oceans, where they spend years growing and maturing until returning to the same spawning beds to create the next generation of salmon.
5. Eagle Center: using sticks, moss, feathers, pipe cleaners, and other classroom materials, students will work with their group to build a nest for their eagle babies. Students will also learn about the maturation cycle of an eagle from egg to adult.

Assessment: Students will play the *Connectedness Card Game*, in which each student gets a card with a picture of an animal or plant, specific to the lesson. In a circle, students take turns matching their card to someone else's. In order to make a match, students need to describe their reasoning. Once the student has gone, they put their card in the centre and the student they matched with goes next. Teachers will take notes of what students say throughout the activity; looking for strong explanations of the connections between the species the students' are asserting.

Curricular Integration: All living things sense and respond to their environment; the motions of Earth and the moon cause observable patterns that affect living and non-living systems; identify First Peoples perspectives and knowledge as sources of information

Resources:

[Video] Harvesting Cedar <https://vimeo.com/128505634>

Lesson 6 Ask a Scientist

Objective: For students to talk to a scientist and learn more about the coastal marine ecosystem they live in and what the role of a scientist is.

Activity: Students will formulate questions they have about the coastal rainforest ecosystem and the relationships between black bears, salmon, eagles and cedar trees in advance of the lesson. During the lesson we will have a guest speaker from the Habitat Conservation Trust Foundation, in Victoria B.C or the students will Skype with a scientist. The students will learn about the interconnectedness of an ecosystem and facts about our local forest environment and the units' key species. They will also be able to have a question and answer period with the scientist to ask their specific questions and what conservation tactics are in place to protect our unique biome.

Assessment: Students will be asked to write down two things they learned about ecosystems from the scientist as well as one question they still have about them or one of the unit's four species

Curricular Integration: Demonstrate curiosity about the natural world

Resources:

HCTF Education

<https://www.hctfeducation.ca/workshops/>

Skype a Scientist Program

<https://www.skypeascientist.com/>

Lesson 7

Nature Walk & Forest Exploration

Objective: Learn about the interconnectedness of living things in the forests and why it's important to be respectful of all living things

Activity: Students will revisit the forest where they went for their first Nature Walk. In this lesson, students will work in pairs or small groups to complete a nature scavenger hunt - trying to find as many items on their sheet within the allocated time. All items on their list will be local to their environment and connected to things discussed in class. A few of the items will also be collected for the following lesson in which a local elder will come to the class to create a traditional tea with the students

Assessment: The sheets used in the scavenger hunt will be the assessment tool, in which students demonstrate that they were able to look for and identify elements in our forests.

Curricular Integration: Express and reflect on personal or shared experiences of place; demonstrate curiosity about the natural world; Experience and interpret the local environment

PHE: participate in physical activity

Resources:

Scavenger hunt grid with pictures

Forest Field Identification Cards:

<https://www.hctfeducation.ca/wp-content/uploads/2015/10/Forest-ID-Cards-3-Up.pdf>

Lesson 8

Importance to First Peoples

Objective: Students will learn about the meaning and importance of each species to the First Peoples of Vancouver Island as well as how the local peoples used locally sourced materials from the forest to create tea. Through this lesson, students will understand why it is important to be respectful of these species and our forests in general.

Activity: An Indigenous elder or community member will be invited into the classroom where we will be exploring animal symbolism based on WSANEC or T'Sou-Ke stories. Here students will learn the traditional knowledge for each of the four species and their importance to these local peoples. This lesson will be concluded with a traditional tea created from locally sourced ingredients

Assessment: Students will complete the "What Animal Are You?" worksheet and describe their characteristics. This sheet will be glued in students' ISNs.

Curricular Integration: Identify First Peoples perspectives and knowledge as sources of information

Lesson 9

Animal in the Summer: Survive!

Objective: Introduce students to the importance of ecosystems and the interconnectedness within them.

Activity: There will be a quick reintroduction of the earth on a tilt and how this creates the summer season. Students will participate in a game called "Survive!" which will help teach them about predator-prey relationships within an ecosystem. The predators will be the bears and the prey will be salmon to help students make connections to the local species.

Assessment: monitor students participation during the game. At the end, come together to discuss what they thought about the game. What challenges they had. What patterns did they recognize? Prompts will lead to a discussion of predator-prey relations in an ecosystem

Curricular Integration: All living things sense and respond to their environment; Transfer and apply learning to new situations

PHE: participate in physical activity

Resources:

Survive! Game Lesson Plan:

https://www.hctfeducation.ca/wp-content/uploads/2014/09/Survive_Lesson.pdf

[Video] Grizzly bears catching salmon: <https://www.youtube.com/watch?v=TSSPDwAQLXs>

Lesson 10 Salmon in Summer

Objective: Understand the interconnectedness of an ecosystem and the importance of salmon to bears, eagles, people and trees. As well as learn about threats to salmon's survival and the way Indigenous people respect and respond to this species

Activity: Students will begin the lesson by discussing in what way they have a connection to salmon and how salmon is important to people. They will learn about the Indigenous cultural connections with salmon by listening to a local Indigenous origin story of salmon. Students will have an opportunity to taste smoked salmon- a preparation that many First Peoples used to cure the meat to last the winter. Next students will learn about the importance of salmon to its local ecosystem. They will watch a short video that illustrates how many other organisms, particularly trees in temperate forests, are impacted by this species. The lesson will conclude with a video examining how this key species is under threat due to environmental impacts, fishing practices, hatcheries, and disease.

Assessment: Prompts for ISN

1. What is one threat you learned about today to salmon and their continued survival on our coasts?
2. What did you learn about Indigenous peoples and their connection to salmon?
3. Name a species that is reliant on salmon and how they interact with salmon (ie, bears feed to salmon to fatten up before returning to hibernation)

Curricular Integration: Express and reflect on personal or shared experiences of place; Identify First Peoples perspectives and knowledge as sources of information;; Identify some simple environmental implications of their and others' actions

Social Studies: The pursuit of valuable natural resources has played a key role in changing the land, people, and communities of Canada; Physiographic features and natural resources of Canada

ELA: Exploring stories and other texts helps us understand ourselves and make connections to others and to the world; Access and integrate information and ideas from a variety of sources and from prior knowledge to build understanding

Resources:

[Video] D. Suzuki: Salmon and the forest

<https://www.youtube.com/watch?v=UOtkekP-sxk#action=share>

[Video] Shoreline Restoration <https://www.youtube.com/watch?v=9LJghscrfs>

[Documentary] Artifishal <https://www.youtube.com/watch?v=XdNJ0JAwT7I>

Lesson 11 Trees in The Fall

Objective: Learn about the season of autumn and how this leads to changes in trees' activities

Activity: Students will begin the lesson by drawing on their prior knowledge and experiences to discuss what changes they notice trees going through during this season. They will learn that not all trees shed their leaves during this time of year and about the distinction between evergreens and deciduous trees. We will look at cedar trees as an example of an evergreen tree by examining the cedar artefacts previously brought in during Lesson 1. Students will also watch a video about the importance of cedar trees to the First Peoples. After this video, the teacher will model how to identify and summarize key arguments in the video in preparation for Lesson 12.

Assessment: ISN Prompt: Cedar Trees are different from others that we think of in fall, why? What makes cedar trees special?

Curricular Integration: Identify First Peoples perspectives and knowledge as sources of information; Identify some simple environmental implications of their and others' actions; Express and reflect on personal or shared experiences of place

Social Studies: The pursuit of valuable natural resources has played a key role in changing the land, people, and communities of Canada

ELA: Access and integrate information and ideas from a variety of sources and from prior knowledge to build understanding

Resources:

[Video 0:00-4:45] The Story of Cedar by Herb Rice <https://bit.ly/storyofcedar>

Identifying Trees Outline:

https://www.hctfeducation.ca/wp-content/uploads/2014/12/ComparingTrees_TreeID1.pdf

Lesson 12

Impact of Forestry on Our Forests

Objective: For students to develop their understanding of the forestry industry in BC and its many pros and cons of it

Activity: Students will be broken into groups of 3-4 and assigned a video pertaining to forestry. Each of the videos will examine a different perspective on the benefits and drawback of the forestry industry. Groups will be asked to identify the main arguments presented in the video, discuss them as a group, and share these points to the rest of the class. (More than one group can examine the same video). Once each group has had a chance to present their findings, bring everyone together for a class discussion about the forestry industry.

Assessment: Students will be assessed on their presentation to their peers. The teacher will be looking for a clear summary of the major arguments taken from the videos and contributions students offer during class discussion.

Curricular Integration: Identify some simple environmental implications of their and others' actions; Transfer and apply learning to new situations; Identify First Peoples perspectives and knowledge as sources of information

Social Studies: The pursuit of valuable natural resources has played a key role in changing the land, people, and communities of Canada

ELA: Exploring stories and other texts helps us understand ourselves and make connections to others and to the world; Access and integrate information and ideas from a variety of sources and from prior knowledge to build understanding

Resources:

[Video] Forestry, BC Tomorrow www.bctomorrow.ca/blog/forestry

[Video] Patagonia Workwear: Central Westcoast Forest Society
<https://www.youtube.com/watch?v=I9a5SOJe3IQ&t=51s>

[Video] Great Bear Rainforest | National Geographic
<https://www.youtube.com/watch?v=qhLRn3fU31w>

Lesson 13 What is Winter?

Objective: In this lesson, students will consider why we experience winter and build meaning from personal experience.

Activity: Read, *The Snowy Day*, Ezra Jack Keats. After the book reading, have students “Think, Pair, Share’ about other things that happen during winter? Once students have had an opportunity to contextualize the season, ask students if they’ve ever wondered why we experience winter. Have students stand up and demonstrate the path the sun travels in the sky in summer (overhead) versus winter (along the horizon) with their arms.

Assessment: Prompt for ISN: “Fortunately, we have comfortable homes with heat and hot water, and grocery stores that bring food from warmer places in the world, but it can be very difficult to be an animal in winter. Animals have three strategies to survive winter – migrate, adapt, or hibernate. In your ISN, make a prediction on what each of our four species does to prepare for winter.”

Curricular Integration: annual seasons are caused by Earth’s axis, rotation, and orbit; humans sense and respond to the changes of season.

ELA: Stories help us learn about ourselves, our families, and our communities; Readers use strategies to make sense of what they read, hear, and view; use sources of information and prior knowledge to make meaning

Resources:

The Snowy Day, by Ezra Jack Keats

Animals in Winter Lesson Plan:

<https://www.hctfeducation.ca/wp-content/uploads/2016/08/Lesson-Animals-in-Winter.pdf>

Lesson 14 Our Forest in Winter

Objective: This is a continuation of lesson 12. Students will think about how local animals respond to winter in a variety of ways: migrate, adapt, or hibernate.

Activity: Read the book *When Winter Comes*, by Pearl Neuman as an introduction to the lesson. In groups, students will be given one of the 4 species we are examining and discuss what they know about each. Using non-fiction texts (provided by a teacher/librarian) they will research/infer how the animal survives winter based on migrating, adapting, or hibernating. They will also examine the importance of each species to the First Peoples during this harsh season. One student from each group will scribe the research onto a graphic organizer, ex. knew/new.

Assessment: Students will come together as a class and discuss what they learned in their groups. As students are sharing, teachers will be scribing notes on a large chart.

Curricular Integration: animals sense and respond to their environment using migration, adaptation, or hibernation.

ELA: Begin to use sources of information and prior knowledge to make meaning; Use age-appropriate reading, listening, and viewing behaviours and strategies to make meaning from texts

Resources:

When Winter Comes, by Pearl Neuman

Animals in Winter Lesson Plan:

<https://www.hctfeducation.ca/wp-content/uploads/2016/08/Lesson-Animals-in-Winter.pdf>

Lesson 15
Field Trip to Goldstream Park

Objective: For students to take what they've learned through the unit and experience their local environment with this new perspective

Activity: The students will go on a field trip out to Goldstream Provincial Park to experience the forest through the lens of their newfound knowledge about our local forest ecosystem. Families will be invited to attend and learn from their students about our local ecosystem.

Assessment: The teacher will be prompting and observing discussions students have with one another as well with the chaperones to better determine their understanding of the Coastal rainforest we live in, as well as some of the creatures that live in the region and their behaviours throughout the year.

Curricular Integration: Express and reflect on personal or shared experiences of place; Demonstrate curiosity about the natural world; Experience and interpret the local environment

Lesson 16
Wrap-up: Forest Skits

Objective: Students will demonstrate what they've learned during the unit by performing skits that the students create.

Activity: Students will be split into groups of 4-5. Each group will come up with a 10-minute skit that demonstrates the interconnectedness of black bear, eagle, salmon, and cedar tree. They can choose to focus their skits on any of the four species discussed, the effect of seasons on these species, or the importance of each species to us and First Peoples. This activity should be introduced early in the unit and students should be given time to work on it throughout.

Assessment: The entire afternoon will be allocated to students' presentations, and parents will be invited to watch their children's performances. Teachers will make note of each group's learning and how it connects to the learning outcomes.

Curricular Integration: Demonstrate an understanding and appreciation of evidence; Identify some simple environmental implications of their and others' actions; Cooperatively design projects; Transfer and apply learning to new situations; Generate and introduce new or refined ideas when problem solving; Represent and communicate ideas and findings in a variety of ways

ARTS: Connect knowledge and skills from other areas of learning in planning and creating works for art; elements and principles that together create meaning in the arts, including but not limited to drama

ELA: Use personal experience and knowledge to connect to text and deepen understanding of self, community, and world

Lesson Extensions

Lesson 1: Exploring A Forest	
<p>Learning Outcomes</p> <ol style="list-style-type: none"> 1. Introduce forests as a type of biomes. 2. Spark interest in learning about our local forest 3. Use the body's senses to investigate characteristics of a forest 	<p>Curricular Connections</p> <p>Science: All living things sense and respond to their environment; sensing and responding (human's five-senses); Biomes are large regions with similar environmental features; demonstrate curiosity about the natural world; Experience and interpret the local environment</p>
<p>Prior Knowledge</p> <p>Basic understanding of our five senses, an idea of what a forest is</p>	<p>Adaptations & Modifications</p> <p>This activity could be taken outdoors to a wooded area. Students who have difficulties with writing can work with a partner and co-write their entries into one ISN</p>
<p>Materials:</p> <ul style="list-style-type: none"> - Blindfold - MP3 player (iPad or computer) - Headphones - Magnifying glass - Cardboard box - Duct Tape - Forest artefacts: cedar bark strips, cedar boughs, cedar cones, pine needles, mosses/ lichen, ferns, pinecones from firs and spruces, and rocks 	
<p>Vocabulary:</p> <p>Biome: a large area of the planet that is classified by the plants and animals that live there. The five major biomes are: aquatic, desert, forest, grassland, and tundra</p> <p>Ecosystem: the interaction of living things and nonliving things in a particular environment.</p> <p>Senses: the way the body perceives external stimulus through sight, smell, hearing, taste, and touch.</p> <p>Temperate forest: a forest found between the tropical and boreal regions, located in the temperate zone. It is within the second-largest biome on the planet, covering 25% of the world's forest area</p>	
<p>Introduction</p> <p>The class will quickly start with a discussion of what our senses are and what information they give us about our environments. There will also be questions asked to the class about what they think a forest is and what they contain, as well as a brief introduction to the concepts of biomes.</p> <p>Students will be briefly told what each station requires of them and what they should be writing down in their ISNs during the activity. These instructions will be displayed at each station to ensure students understand what to do.</p>	

Main Activity

Sight: Using a magnifying glass to investigate the details of cedar bark, boughs and cones. As well as other species in our forests such as pine needles, mosses/ lichen, ferns, pinecones from firs and spruces, and rocks. Students will complete a drawing of one of the pieces of a forest that they liked best and put in inside their ISN

Hearing: Students will listen to the two soundscapes taken from two distinct forests (tropical and temperate) and describe aspects from each that they hear. They will also compare and contrast the differences between the two soundscapes. Students will write these observations into their ISN

Hoh Rain Forest in Olympic National Park

<https://www.soundtracker.com/products/one-square-inch-silence/>

Ecuadorian Amazon Rainforest

<https://www.soundtracker.com/products/zabalo/>

Touch: Students will explore the details of the cedar trees using only touch. Using a cardboard box, with two holes cut out for students to put their hands in, place tree bark, leaves and cones and seal the lid so students can't peek inside. Students have to guess what they are touching and use all the clues to piece it together. Students will describe one of the items they felt in their ISN

Smell: Blindfolded, students will bring bark and leaves up to their noses to explore the scent of cedar trees. There will also be other items from a forest for students to explore such as soil, moss, pinecones etc. Students will be prompted to write in their ISN about what they smell and connect it to their lives in some way (ie a family camping trip they went on)

(Taste will be covered during Lesson 9 later on in the unit)

Closure

Following the completion of the stations, there will be a discussion promoting reflection of the student's experiences and what things they learned about a forest through exploring with their senses

Assessment

As students complete each activity station, they will record observations and questions in their ISNs using a graphic organizer. The teacher will collect all ISNs at the end of the day and read through students' entries. They will be looking for thoughtful entries and effort, rather than any direct content specific to the lesson.

Considerations (teacher points, safety concerns, etc)

Ensure students are comfortable with each activity, some students who have sensitivities or allergies to certain materials should be allowed for modifications to ensure their safety, both physically and psychologically

While students are working, the teacher should be circulating around the classroom and engaging with students to prompt their thinking and have them explain their experiences to the teacher.

Students should be aware of any safety consideration while blindfolded

Lesson 9: Salmon in Summer

Learning Outcomes

1. Understand the interconnectedness of an ecosystem and the importance of salmon to bears, eagles, people and trees.
2. Learn about the way Indigenous people respect and respond to this species.
3. Describe potential threats to salmon's survival.

Curricular Connections

Science: Express and reflect on personal or shared experiences of place; Identify First Peoples perspectives and knowledge as sources of information;; Identify some simple environmental implications of their and others' actions

Social Studies: The pursuit of valuable natural resources has played a key role in changing the land, people, and communities of Canada; Physiographic features and natural resources of Canada

ELA: Exploring stories and other texts helps us understand ourselves and make connections to others and to the world; Access and integrate information and ideas from a variety of sources and from prior knowledge to build understanding

Prior Knowledge

Students should be familiar with the concepts of an ecosystem and salmon

Adaptations & Modifications

Students who struggle to write may use pictures to express their learning in their ISN or only answer as many questions as they are able to.

Materials:

- Computer
- Projector
- Salmon and The Forest [Video]: <https://www.youtube.com/watch?v=UOtekeP-sxk#action=share>
- Shoreline Restoration [Video] <https://www.youtube.com/watch?v=9LJghscrfvs>
- Artifishal [Documentary] <https://www.youtube.com/watch?v=XdNJ0JAwT7I>
- Candied or smoked salmon
- All-diets friendly alternative snack

Vocabulary:

Fishery: an entity engaged in raising or harvesting fish which is determined by some authority to be a fishery.

Hatchery: a facility where eggs are hatched under artificial conditions, especially those of fish or poultry.

[SĆAA/NEW](#): SENĆOŦEN word for fish

Smoking: a process of preserving food by exposing it to smoke from burning or smouldering material, most often wood.

Introduction

Students will begin the lesson by discussing in what ways they have a connection to salmon and how salmon is an important species for many people in BC and the world. They will listen to a story from a local Indigenous elder or community member and learn about the origin story of salmon, how indigenous peoples are tightly connected to the salmon and why they hold the salmon in high regard.

Main Activity

Next students will learn about the importance of salmon to the local ecosystem. They will watch a short video that illustrates how many other organisms, particularly trees in temperate forests, are impacted by this species. The lesson will conclude with a video examining how this key species is under threat due to environmental impacts, fishing practices, hatcheries, and disease. After each video, there will be time for a discussion about it to see what students learned from the videos and what additional questions they have after watching the films. Students will then discuss ways to protect salmon and ensure their survival. Students will be encouraged to come up with actionable ideas that they can implement going forward.

Closure

Students will have an opportunity to taste smoked salmon, which has been a traditional dish from local indigenous peoples since time immemorial.

Assessment

The teacher will be listening to students conversations and discussion throughout the lesson to ensure students are clearly understanding the lesson. To complete the lesson there will be three guiding questions for students to respond to within their ISN:

1. What is one threat you learned about today to salmon and their continued survival on our coasts?
2. What did you learn about Indigenous peoples and their connection to salmon?
3. Name a species that is reliant on salmon and how they interact with salmon (ie, bears feed to salmon to fatten up before returning to hibernation)

Considerations:

Presenting videos about conservation can be a sensitive subject. Be aware that there may be students in your class who have direct experience, or whose parents are in the fishing industry. Be clear to the students that you are not opinionating that fishing for salmon is wrong, but need to be aware of both the benefits and risks of this industry so that students can make informed decisions in the future.

Students who do not eat salmon may feel as though they are missing out on something, it is important that an alternative food is also provided for the class to ensure everyone is able to have a snack at the end of this lesson.

Additional Resources

- Fieg, A. (2017, March). *Keepers of great bear*. The Nature Conservancy.
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