



My Seasonal Round

An Integrated Unit for Elementary
Social Studies and Science

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Proof of Concept Test

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My Seasonal Round

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About This Resource

This unit illustrates the integration of Social Studies and Science. The seasonal round was chosen as a theme for this unit because it lends itself well to integrating the topics of BC First Nations study in Social Studies, and habitat in Science. A seasonal round:

[a]lso known as the annual round ... refers to the pattern of movement from one resource-gathering area to another in a cycle that was followed each year. Spring, summer and fall saw the people moving to a variety of resource areas while during the harsher winter they gathered in winter villages. The abundance of resources also determined how often people moved. In areas that had a greater abundance of variety, people could stay in one location for longer than in areas where resources were scarcer.

Campbell, Kenneth, Charles Menzies, and Brent Peacock.
B.C. First Nations Studies. BC Ministry of Education, 2003, page 25

The topic of the resource is the seasonal rounds in the four geographic regions of BC, through the perspective of Aboriginal groups (past and present) who live in these regions. Topics that will be explored include:

- habitat
- natural resources
- stability and change
- living and non-living components of habitats

My Seasonal Round

Focus questions guide this unit. In the first lesson, tell students the following:

You are a member of a BC First Nation (specific First Nation to be chosen later). You've been selected to live one seasonal round with your First Nations ancestors in pre-contact time. When you return to the present, you'll need to report back on the differences and similarities between the two time periods.

You'll also have to decide whether to stay in the present or return to live with your ancestors. To decide, you'll need to answer the following unit focus questions:

- *How is the seasonal round you live through in the present day different from that of your pre-contact ancestors?*
- *What time period would you prefer to live in and why?*

To complete the unit:

- Students will gather journal entries, activities and field trip worksheets in a *Seasonal Round Field Journal*.
- Students will work in small groups to create a “living diorama” of a seasonal round of a BC First Nations community — in past and present time periods. The living dioramas will originate from students’ interests and inquires, and can include:
 - creating structures (components) such as model building
 - role playing
 - collecting or making “artifacts,” tools, or costumes
 - performing a song, dance, or skit (see note below)
 - cooking
 - creating a multimedia presentation (photos, video)
 - forming a tableau
 - writing and illustrating a picture book
 - drawing or painting a poster
 - making a collage

The completed dioramas will be the students’ final demonstration of learning and will be shared with the rest of the class, parents, community members, and possibly other students in the school.

Note: Teachers are reminded that songs and dances may have spiritual significance. In many cases, performing a dance or song is a privilege to be earned. Imitations of these important cultural traditions may be seen as disrespectful and offensive.

- Students will answer the unit focus questions individually during the final day of sharing.

Curricular Fit

The BC Ministry of Education is in the process of transforming K–12 curricula. The topics in this resource fit well with the “Curricular Competencies” and “Content” outlined in the Fall 2013 draft curricula for Grade 3 Social Studies and Science. The activities also address learning standards found at other grade levels and in other subject areas. A variety of options are provided in this resource to help you adapt activities to meet the needs of your students and to address a wide range of learning standards.

Cross Curricular Competencies

As part of the new directions in curriculum, the BC Ministry of Education has identified a set of competencies that weave through all curricular areas. The purpose for implementing cross-curricular competencies is to develop the whole child: intellectually, personally and socially. In order for deeper learning to occur, a set of intellectual, personal, and social skills are required for students to make connections to previous learning and their own experiences.

The following are the proposed competencies:

Thinking Competency

- Critical thinking
- Creative thinking
- Reflective thinking

Personal and Social Competency

- Positive personal and cultural identity
- Personal awareness and responsibility
- Social awareness and responsibility

Communication Competency

- Language and symbols
- Digital literacy

This resource focuses primarily on Personal and Social Competency with its subdomains of personal and cultural identity, personal awareness and responsibility, and social awareness and responsibility. This competency sets out abilities that relate to students’ identities in the world, both as individuals and as members of their communities and society. Teachers are encouraged to develop and include opportunities for students to demonstrate their personal and social competency in this unit.

For a detailed explanation of the competencies, go to the Ministry of Education site, *Transforming BC’s Curriculum* and click on “Defining Cross Curricular Competencies.” http://www.bced.gov.bc.ca/irp/transforming_curriculum.php

Personalized Learning

This resource is also designed to support the “Personalized Learning” approach to teaching and learning:

- Students’ interests, ideas and passions guide the learning.
- Students’ different ways of learning are supported.
- Teacher assessment is ongoing and the teacher monitors progress throughout the unit.
- Students engage in peer and self-assessment.
- Community resources support inquiry-based learning.

How do I use this resource?

The unit spans three to four weeks. To adapt this timeline, consider these options:

- Teach most of the unit in one 3-week period, but revisit some of the ideas throughout the year as the seasons change.
- Break up the contents of the unit to span the entire year.
 - Students observe the changing seasons as they occur.
 - Students have the chance to observe a local habitat several times throughout the year and record their observations, comparing and contrasting what they find in each season.
 - Students take part in different seasonal round activities at different times of the school year.

A variety of lessons and activities are suggested in this unit. You may choose to do some of these activities as they are, adapt them to suit your needs, or substitute activities specific to your geographic region of British Columbia.

Questions, resources, and sequence are suggested, but the students’ inquiry will determine how each lesson will develop the unit. The lessons progress in the following way:

- **Lesson 1** – What is a seasonal round?
- **Lesson 2** – How do seasonal changes affect plants and their habitats?
- **Lesson 3** – How do seasonal changes affect animals and their habitats?
- **Lesson 4** – What are the four main geographic regions of BC, and what are their different features?
- **Lesson 5** – What does a seasonal round look like?
- **Investigate and Present** – Students research to create and share living dioramas with parents, other students, and community.

Supporting Online Resources

This unit is supported by a companion website:

- Open School BC, *My Seasonal Round*
http://www.openschool.bc.ca/elementary/my_seasonal_round/

It includes resources for both the teacher and students:

- An annotated list of referenced resources for teachers and students
- *Blackline Masters*
- A teacher guide to *Tools for Generating Questions* and visual aids

What Is a Seasonal Round?

Learning Objectives

Students will:

- discuss their prior knowledge
- generate questions for inquiry
- create a personal seasonal round calendar
- reflect on their learning

Time frame

Two to four classes

Cross-curricular Connections

Social Studies, Language Arts, Art

Preparing For the Lesson

- Research seasonal rounds.
- Collect resources for the lesson and for the unit on seasonal round.
- If possible, invite an Elder or First Nations community member to the class to discuss seasonal round. Contact your District Aboriginal Education Coordinator who can assist you in contacting the local Aboriginal community.

Ministry of Education, *Aboriginal Contact – Basic Information*

<http://www.bced.gov.bc.ca/apps/imcl/imclWeb/AB.do>

- Have students make a *Seasonal Round Field Journal* to hold their reflection entries and other paper-based activities.
 - They could use a binder or make a journal.
 - Journals will be handed in to teachers at the end of the unit.
 - For journal ideas see:
KidsGardening, *Making Field Journals*
This site provides instructions and a materials list.
<http://www.kidsgardening.org/classroom-projects/making-field-journals>

Materials

Blackline Masters

- “Personal Seasonal Round Calendar” (*Blackline Masters*, page 11)
- “Pause and Ponder Journal” (*Blackline Masters*, page 1)

Books

- Armstrong, Jeannette C. *Neekna and Chemai*. Penticton, BC. Theytus Books, 2008.
This book introduces Neekna and Chemai, two little girls growing up in the Okanagan Valley in pre-contact time. Through these two friends, we learn about the seasonal life patterns of the Okanagan people.

Online Resources

- Google images of seasonal rounds (use search term “seasonal”)

Other

- Books, videos, photos, and posters of the four seasons, the seasonal round, and animals and habitats
- Computer and projector

Background Information

Teacher Resources

- Definition of seasonal round:

Also known as the annual round, this term refers to the pattern of movement from one resource-gathering area to another in a cycle that was followed each year. Spring, summer and fall saw the people moving to a variety of resource areas while during the harsher winter they gathered in winter villages. The abundance of resources also determined how often people moved. In areas that had a greater abundance of variety, people could stay in one location for longer than in areas where resources were scarcer.

Campbell, Kenneth, Charles Menzies, and Brent Peacock.
B.C. First Nations Studies. BC Ministry of Education, 2003.

- The Learning Circle: Classroom Activities on First Nations in Canada – Ages 4 to 7, *Unit 2 – The Seasons*
Lesson plan about First Nations and seasonal changes.
<http://www.aadnc-aandc.gc.ca/eng/1316530132377/1316530184659#un2>
- *Resource Gathering, Seasonal Round Stsillen*
This website discusses the seasonal round of the Secwepemc First Nations (Southern Interior).
http://secwepemc.sd73.bc.ca/sec_village/sec_round.html
- TrailTribes, *Camp Life and Seasonal Round*
This website tells the story of the seasonal round of the Blackfeet First Nations (primarily Alberta and Montana) discussing seasonal activities and the plants and animals harvested for food.
<http://www.trailtribes.org/greatfalls/camp-life-and-seasonal-round.htm>
- Alaska Native Knowledge Network, *The Four Corners of Life: A Traditional Seasonal Round (Athabaskan)*
This website tells of the Four Corners of Life – the seasonal round of the Minto First Nation. It includes very good information on events and activities during the seasons, and also written oral histories about the seasonal round. (Oral histories could be read out to class.)
<http://www.ankn.uaf.edu/curriculum/Athabaskan/ObservingSnow/fourcorners.html>

- Cultural Survival, *Wild Food in its Season: the Seasonal Round of Harvest Activities in Fort Yukon*
This site takes the reader through a present day seasonal round with the Athabaskan First Nations of Fort Yukon, Alaska.
<http://www.culturalsurvival.org/publications/cultural-survival-quarterly/united-states/wild-food-its-season-seasonal-round-harvest-a>

Student Resources

- *Resource Gathering, Seasonal Round Stsillen*
This website discusses the seasonal round of the Secwepemc First Nations (Southern Interior of BC).
http://secwepemc.sd73.bc.ca/sec_village/sec_round.html

Optional Topic

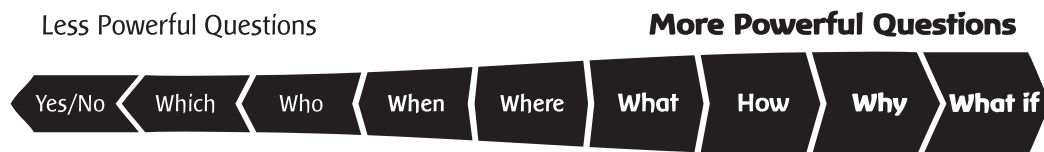
Generating “Powerful” Questions

Questioning is part of the inquiry-based approach to teaching and learning. Inquiry-based learning will be new for some students (and teachers). For more resources on this approach, go to the “Teacher Area” of the companion website. http://www.openschool.bc.ca/elementary/my_seasonal_round/

Tools for Generating Questions details how to help students construct both “searching” and “powerful” questions.

Begin this unit with a mini-lesson on how to generate “powerful” questions — ones that aren’t answered with “yes” or “no” or a single word.

1. Copy the image below on poster paper where it will be displayed for the whole unit. You may also create handouts for students using “How powerful is your question?” (*Blackline Masters*, page 2).



Searching questions: questions that can be answered by yes or no, or in a sentence or two that you can “search out.” Searching questions can be important as well, but don’t lead to the exploration of diverse points of view or multiple responses/solutions.

Powerful questions: questions that ask “How,” “Why,” “What would happen if...,” or “Evaluate whether...” These questions can have multiple responses and viewpoints.

2. Ask students to choose a topic and give examples of “searching questions” using the prompts at the less powerful end of the continuum (which, who, when, etc.).
3. Ask students to give examples of powerful questions around the chosen topic.
4. Discuss why powerful questions are more interesting to explore.
5. Tell students that in this unit they will be asked to generate powerful questions.

Delivering the Lesson

(Note: Students should have already prepared their *Seasonal Round Field Journal*.)

Access Prior Knowledge

Ask students:

- *Imagine not having any calendars or not knowing the date.*
- *How would you know the seasons were changing just by looking around you?*
- *What do you know about the seasons?*

Inquire

1. **Imagining Exercise:** Have students close their eyes and ask them to remain silent until after the exercise is finished.

Dim the lights in the class. After each question, pause for about 10 seconds to allow the students time for imagining.

With eyes closed, have students imagine they are living hundreds of years ago.

You don't have heated houses for shelter, vehicles to travel around in, or stores to buy food and clothing from.

In their mind's eye, have them look around.

What season is it?

What do you see around you?

Are there people? Animals?

What does the landscape look like?

What do you hear? How do you feel?

Are you warm or cold?

What are you wearing?

What do you smell?

Is there a fire burning?

Is there something cooking on the fire?

If so, what is it?

If there is nothing cooking on a fire, go to the place you will find food.

What are you eating?

How does it taste?

You are now walking towards your home?

What is it made of?

Who is with you in your home?

Have students record or illustrate what they imagined.

2. In small groups, have students discuss what they imagined during the exercise. Ask:
 - *How would you survive from season to season?*
 - *What foods would you eat?*
 - *How would you shelter yourself?*
 - *What materials would you use to make tools?*Discuss ideas with the rest of the class and record.
3. Ask the class to name the things people need to live (food, water, air, shelter). Discuss how this relates to their imagining exercise.
4. Read *Neekna and Chemai*, by Jeannette C. Armstrong.
As a class, discuss how the two friends lived from season to season.
5. Read *Resource Gathering, Seasonal Round Stillen*, about the Secwepemc First Nations Seasonal Round.
http://secwepemc.sd73.bc.ca/sec_village/sec_round.html

6. Ask the class:

- *What is a seasonal round?*

Encourage students to think about the two words separately to develop their definition. A mind map could be used to record ideas. Ask probing questions as students build a collaborative definition, and write it on the board. Tie in seasonal round with a discussion of First Nations.

7. Tell students that two focus questions will guide their inquiry for the whole unit and to keep these questions in the back of their minds as they work through the lessons.

Tell students to imagine:

You are a member of a BC First Nation (specific First Nation to be chosen later). You've been selected to live one seasonal round with your First Nations ancestors in pre-contact time. When you return to the present, you'll need to report back on the differences and similarities between the two time periods. To decide, you'll need to answer these unit focus questions:

- *How is the seasonal round you live through in the present day different from that of your pre-contact ancestors?*
- *What time period would you prefer to live in and why?*

Introduce or review what “pre-contact” means. Tell students that by researching and gathering information throughout the unit, they will form their own opinion and explain why they came to their answer. They will present their opinion as part of their final living diorama presentation.

8. Lead a discussion with the class and guide students to generate “powerful” questions to help them answer the main question. This will be students’ first chance to generate questions for inquiry in this unit, so it is a good opportunity to guide them through the process. Help them to refine questions and informally classify the questions as either “searching” or “powerful.”

Examples of powerful questions:

- What would a seasonal round look like in our region?
 - How does this compare to the seasonal round in other areas?
 - What has made our seasonal round easier now compared to pre-contact times?
 - What did (do) Aboriginal people eat during each season?
 - How do Aboriginal people harvest and preserve their food?
 - Why do seasonal rounds change depending on the region of BC?
 - Why are seasonal rounds important?
 - How does a seasonal round contribute to the uniqueness of a place and community? Discuss with students why the above questions are powerful. Who might have an opinion about these questions? How and why might opinions differ?
9. On newsprint or poster paper, write the questions selected from those generated by the class. Tell students that if they find the answer to any of the questions during the course of the unit, to write the answer down on a Post-it note and place under the question. Review answers regularly.

Students also write down three “searching” questions and three “powerful” questions in their *Seasonal Round Field Journal*.

Note: Tell students that they will hand in the journals at the end of the unit for assessment.

10. Project images of seasonal rounds (Google images) for the class. The circular diagram is split into twelve “pie slices” labelled by month, but there is also an outer ring for recording other ways that time can be measured. Examples of other ways include *deer season*, *mud season*, or *winter thaw*. Ask students to name other ways time can be measured.

First Nations seasonal round calendars might include the following:

- fishing season (spawning of fish)
- hunting season (migration of ducks, geese, etc.)
- planting season of garden crops
- gathering edible plants (berries, nuts, fresh greens, roots, and herbs) and fungi such as mushrooms
- storing and preserving food (canning tomatoes, drying fruits, etc.)
- gathering herbal medicines
- gathering raw materials (baskets, weaving, etc.)
- when seasonal foods are available in farmers' markets
- seasonal celebrations
- moon phases
- solstices, equinoxes, cross-quarter days
- annual appearances of comets
- seasonal star cycle
- blossoming of flowers
- appearance of insects and pollinators

11. Tell students:

Many years ago, First Nations people followed the seasons and food sources. Many still do today.

- *What might your personal seasonal round include?*
(Eating certain foods at different times of the year, planting a garden in the spring, eating from the garden in the summer and fall, warmer clothes in the fall and winter, playing soccer in the fall, hockey or snowboarding in the winter, celebrations in the winter, going camping in the summer, etc.)

Experience

Have students fill in the "Personal Seasonal Round Calendar" (*Blackline Masters*, page 11) highlighting what their own seasonal round looks like. Tell students to include things that are meaningful to them (events, celebrations, foods, activities, etc.). Encourage students to use colour, and, like the First Nations seasonal round images, use symbols to depict their activities, celebrations and events.

Explore

Have students use the suggested resources below to explore the topics in this lesson. You and/or your students may find and use other resources as well.

Read

- Benyon, William. *Honouring the Salmon (Luutigm Hoon); An Anthology told in the Voices of the Tsimshian*. Prince Rupert, Tsimshian Nation, School District 52, 2002.
The Tsimshian voices of yesterday, today, and tomorrow in this rich and varied anthology capture the nature of the relationship the Tsimshian have with salmon. (Teacher guide available.)
- Adams, Laverne. *How the Coho Got His Hooked Nose*. Coqualeetza Education Training Centre for the Stó:lō Nation, 1981.
This is a traditional story about a wonder of nature, explaining how the Coho salmon gets a hooked nose on its way to the spawning grounds. The story is alive with the salmon's struggle, and keeps the reader's curiosity alive throughout the adventure. The black and white illustrations bring the underwater world to life as they document the Coho's transformation.
- *We'gyet Wanders On: Legends of the Northwest*. Ksan Book Builders. Hancock House, 2006.
The legends collected here are the ancient stories of 'Ksan who have lived in northern British Columbia for over six thousand years. We-Gyet is the essence of every person's frailties exaggerated into gentle humour or ribald laughter. His adventures always end in disaster. His blunders and tricks changed the face of the earth, and the shapes of many of earth's creatures. The stories in this collection show the relevance of traditional stories to modern life, and teach about the interconnectedness of people, animals, and land.

Watch and Listen

- *Going Wild! Natural Law for Kids*. BearPaw Media Productions, 2010. (Available through ERAC)
Going Wild! is a video resource that helps students in Grades 4 to 7 understand the value of nature and learn ideals such as sharing, caring, and kindness. An introduction to Aboriginal Natural Law, it helps students gain an understanding of the importance of working together and having respect for nature. The resource is realistic, clearly laid out, and students will easily relate to the characters, situations, and solutions. Students in the video become aware of the effects of their decisions on themselves and others. The video demonstrates how working together can solve a problem.
- *Summer Home Materials*
Video 2:24 min
A Secwepemc Elder discusses the materials and process of making a summer home. (Southern Interior of BC)
<http://www.youtube.com/watch?v=H1GwODsJgSg&feature=related>

- *Through the Eyes of Elders, The Adams River Salmon Run*
Video 2 min
Secwepemc Elder talks about his connection to nature and how the salmon play a big part in his culture home. (Southern Interior of BC)
<http://www.youtube.com/watch?v=pMO4psH5tTU&feature=related>
- *Cedar Weaving – Squamish Lil'wat Cultural Centre*
Video 2:59 min
Women from the Squamish Lil'wat Cultural Centre give a demonstration of weaving cedar for rope, mats, clothing, and baskets and discuss types of cedar and how and when cedar is harvested. (Coast Region)
<http://www.youtube.com/watch?NR=1&feature=endscreen&v=Ybfaf2pQJ4U>
- *Pit House (Istken) – Squamish Lil'wat Cultural Centre*
Video 0:52 min
A discussion of pit house construction and use at the Squamish Lil'wat Cultural Centre. (Coast Region)
<http://www.youtube.com/watch?v=Z4Kf382lpA0&feature=relmfu>
- Ignite Learning, *What Causes Earth's Seasons?*
Video 2:18 min
This video explores why the earth has seasons — the tilt of the earth's axis, the angle of sun's energy hitting the earth, and the earth revolving around the sun.
<http://www.youtube.com/watch?v=DuiQvPLWziQ>

Reflect and Connect

Share

Once students have completed their seasonal round calendars, have them discuss their calendars with a partner and compare notes. Ask:

- *What differences are there between your seasonal round and your partner's?*
- *What could cause these differences?*
- *Seasonal round reflects human behaviours as much as natural events, so there are many "correct" versions of when the same events occur even though dates may be shifted.*
- *How might your seasonal round be different from those of a student in another region of the province? (Students should point out that warm seasons may be shorter and cold seasons longer so certain wild foods may ripen later and not be available as long in the north.)*

Self-check

- After completing their own seasonal round calendars, students add to or refine their initial questions.
- Students write a short reflective paragraph, using the “Pause and Ponder Journal” (*Blackline Masters*, page 1), reflecting on what they learned.

Go Beyond

Here are some options to help students to delve deeper into the topics presented in this lesson.

- Invite an Elder or a community member from a local First Nations into the class to speak about the seasonal rounds of their ancestors and how it has changed in the present day.
- Students make a seasonal round calendar for the school highlighting events and important dates. These could be printed and sold for a fundraiser.
- Have your class visit the First People’s Gallery at the Royal BC Museum. Exhibits include dioramas and exhibits of housing, fishing, hunting, tools, masks, ceremonies, etc. A virtual tour of the First People’s Gallery will be available in 2013.

Stones, Bones & Pithouse Homes: BC’s Ancient Underground
Grade 4 School Program – Long before hardware stores and shopping malls, First Nations people made their own tools to produce everything they needed. What raw materials did they use? What objects were made and just how did they make them? Find out yourself by following the clues from the fragments and objects unearthed during archeological digs around BC. From ancient “chuckits” to bird bone jewellery; subterranean pithouses to micro-blade technology...a creative, innovative and artistic world will be revealed.

http://www.royalbcmuseum.bc.ca/Sch_Kid/Museum_Pro_Schl.aspx

If you are a BC school travelling to Victoria on an educational field trip to the Royal BC Museum, you may be eligible for travel funding provided by the Provincial Capitol Commission.

http://www.bcpcc.com/visit_youth.php

Assess

Optional: As a class, create a self-assessment rubric for the “Personal Seasonal Round Calendar.”

How Do Seasonal Changes Affect Plants and Their Habitats?

Learning Objectives

Students will:

- discuss their prior knowledge
- generate questions for inquiry
- explore a microhabitat
- record observations and data
- reflect on their learning

Time frame

Two to three classes

Cross-curricular Connections

Science, Social Studies, Language Arts, Art, Math

Preparing For the Lesson

- Organize a field trip to a conservation area, local park, ocean, river or lake side for students to explore a microhabitat. If that's not possible find an appropriate area on the school grounds. Discuss with students the importance of respecting the environment around them.
- Invite an Elder to lead the field trip and discuss what plants First Nations peoples harvest at different times of the year. (The district Aboriginal Education coordinator or resource teacher can assist you in contacting the local Aboriginal community.)
- Arrange for a park interpreter to guide the field trip and teach the class about the plants.
- Read *Tools for Generating Questions*.
This guide is available on the companion website under Teacher's Area and details some useful tools to help students generate, sort, and refine questions for inquiry.
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html

Materials

Supplies

- String
- Metre stick or measuring tape
- Small shovel or stick
- Pencil or pen
- 1 small ziplock bag (to collect leaf, needle or flower, and soil samples)
- 2 large bags (one to pick up garbage and one to carry garbage)
- Magnifying glasses
- Bug boxes
- Optional: Digital camera for each group

Blackline Masters

- “Question Cue: Plants and Their Habitats” if online version not used (*Blackline Masters*, pages 12–13 printed back to back)
- “Plant Habitats and Adaptation Inquiry” (*Blackline Masters*, page 14) or “Sort Circle” (*Blackline Masters*, page 3)
- “Exploring a Microhabitat” (*Blackline Masters*, page 15)
- “Pause and Ponder Journal” (*Blackline Masters*, page 1)

Online Resources

- *First Nations in British Columbia, Indigenous Plant Diva*
Video 9:13 min
Cease Wyss shares her traditional knowledge of plants.
<http://fnbc.info/indigenous-plant-diva>
- Nancy Turner, *Teachings of Respect*
Video 5 min
Dr. Nancy Turner, University of Victoria Ethnobotanist, talks about the seasonal round; people’s connection to plants, nature and the land; sustainability; and respect for all life forms
http://www.openschool.bc.ca/courses/fns12/video_nt.html
- *Digital Inspiration, Time-Lapse Video – See One Year in One Minute*
Time lapse video of the changing seasons.
<http://www.labnol.org/internet/all-seasons-time-lapse-video/12329/>
- “Question Cue: Plants and Their Habitats”
Online vocabulary game to help students generate questions
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html

Other

- Computer and projector
- Plants of BC field guides or other plant identification resources
- *E-Flora of BC, Electronic Atlas of the Flora of BC*
<http://www.geog.ubc.ca/biodiversity/eflora/efloraintroductionpage.html>

Background Information**Teacher Resources**

- Kids Gardening, *Classroom Projects*
An excellent website with detailed instructions for engaging, garden-related classroom activities along with ideas for hands-on lessons.
<http://www.kidsgardening.org/node/18>

Delivering the Lesson

Access Prior Knowledge

Say to students:

In the last class we discussed how Aboriginal people have adapted their homes and the foods they eat depending on the seasons. Plants and animals also change and adapt from season to season. Today's class will discuss plants and their habitats.

Inquire

1. Show video: *Cease Wyss Indigenous Plant Diva*.
An urban Aboriginal single mother, video artist, and community leader shares her traditional knowledge of plants that can be found throughout the streets and everyday spaces of Vancouver, reminding us that the medicines are all around us in our urbanized environments. (9:13 min)
<http://fnbc.info/indigenous-plant-diva>

2. Review what people need to survive (food, air, water, shelter). Tell students:
Similar things are also needed for plants and animals to survive – they need a home, or habitat, that provides conditions (temperature and space) and elements (nutrients, water, air) required for survival. For some animals, their habitat also includes space to roam to follow the seasons and food sources (elk, grizzly bears, wolves).

Ask students:

- *What kinds of habitats do plants live in?* (Forests, oceans, cities, etc.)
 - *What is a microhabitat?*
 - *What happens to plants when the seasons change?*
(Spring: buds on trees; in fall, some trees lose leaves; some plants die in winter, some plants are dormant in winter, but grow again in the spring, etc.)
3. Show video: *Time Lapse Video – See One Year in One Minute*.
This time-lapse video shows the changing seasons. (60 seconds)
<http://www.labnol.org/internet/all-seasons-time-lapse-video/12329/>
 4. Students generate questions for inquiry.
“Question Cue: Plants and Their Habitats” is a tool students can use to generate questions.
 - online version on the companion website
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.htm
 - paper version in *Blackline Masters* (pages 12–13)

(For details on how to play this game, consult *Tools for Generating Questions* on the companion website.)

http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.htm

Examples of questions for inquiry:

- How do the plants and animals in our local habitat adapt to seasonal change?
- Why are there different habitats?
- Why is it important to have different habitats?
- In what ways do plants and other living things in our local habitat depend on each other?
- How do they depend on non-living things (sun, soil, water, air)?
- What characteristics do plants have that help them survive in their habitats?
- How does weather/climate impact plants and trees?
- What challenges does winter bring to plants?
- Why do some trees lose their leaves in the winter?
- What is dormancy?
- What would happen if the climate of an area changed? For example, if winters lasted a lot longer and were colder?

5. Students sort questions.

It is important that students sort the questions they generate to avoid becoming overwhelmed by the number of questions.

Use one of the options below to sort and refine questions, or use another method of your choice.

Option A

In groups, students generate questions about plant habitats and adaptation using the placemat activity “Plant Habitats and Adaptation Inquiry” (*Blackline Masters*, page 14).

- a. Arrange students in groups of no more than four around the sides of the placemat.
- b. Ask groups to record questions from individual students within their allotted space in one of the outside sections.
- c. Provide time for each student in the group to share his or her recorded questions with the group without discussion or debate from the other students.
- d. On a separate piece of paper, have students sort the questions into “searching” questions and “powerful” questions.

- e. Ask students to decide, collectively, on the five most “powerful” questions and record them in the center of the placemat.

Option B

Students can use the “Sort Circle,” (*Blackline Masters*, page 3) “Strengthening Strategies” (*Blackline Masters*, pages 4–7) and the “Question Rater” (*Blackline Masters*, pages 9–10) to sort and refine their questions. Colour copies for projection are available on the companion website. Instructions on how to use these tools are available in *Tools for Generating Questions* on the companion website.

6. Show video: *Teachings of Respect* (5 min).
Dr. Nancy Turner, University of Victoria Ethnobotanist, talks about the seasonal round; people’s connection to plants, nature and the land; sustainability; and respect for all life forms.
http://www.openschool.bc.ca/courses/fns12/video_nt.html
7. Connect questions back to the seasonal round. Guide students to make connections using powerful questions.

Examples of powerful questions:

- How does the change of seasons affect what plants can be harvested in the seasonal round?
- How does the seasonal availability of certain plants affect the lifestyle and culture of the people who depend on the plants?
- What plants or roots are (or were) gathered for food and medicine?
- What parts of the plants are (or were) used for food and medicine (e.g., roots, leaves, flowers, needles)?

Experience

Discuss with class what it means to be good stewards of the environment. Emphasize the importance of not harming or disrupting the plant and its habitat.

Take students to a conservation area, a local park, or the school grounds.

1. Individually, in pairs or small groups, students complete “Exploring a Microhabitat” (*Blackline Masters*, pages 15–17) and observe, sketch, or photograph and describe one plant in a microhabitat.
2. Students collect samples from the ground: a leaf, needle or flower from plants, soil, etc.
3. Students bring samples back to the classroom to examine under a microscope, if possible.
4. In the classroom, students identify their plant(s) using plant field guides.

Explore

Have students use the suggested resources below to explore the topics in this lesson. You and/or your students may find and use other resources as well.

Read

- Lerner, C. *A Forest Year*. Toronto. William Morrow & Company, 1987. This book tells how seasonal changes in a forest affect the plants and animals that live there.

Try This

- Make a terrarium:
North Dakota State University, *Constructing a Terrarium*
This website gives instructions and a materials list for building a terrarium. Experiment with light, moisture and heat. Have students observe and record changes when one or more of these elements change.
<http://ndsuent.nodak.edu/extnews/askext/indoor/23.htm>
- Make dyes or paints out of berries:
Pioneer Thinking, Making Natural Dyes from Plants
Instructions on gathering plant material for dyeing and making dye solution are given in this website.
<http://www.pioneerthinking.com/crafts/crafts-basics/naturaldyes.html>
- Create a garden in the classroom or schoolyard:
KidsGardening, Classroom Projects
This is an excellent website with detailed instructions for engaging, garden-related classroom activities along with ideas for hands-on lessons.
<http://www.kidsgardening.org/node/18>

Reflect and Connect

Share

Each student or pair shares data about their plant in small groups or with the class. Students revisit their questions. Ask:

- *Which questions were answered?*
- *What new questions do you have?*

Have students add their new questions or answers to the newsprint or poster paper hanging in the classroom.

Self-check

Students write a reflection paragraph using the “Pause and Ponder Journal” (*Blackline Masters*, page 1).

Go Beyond

Here are some options to help students to delve deeper into the topics presented in this lesson.

- Using a microscope, students look at the leaves and the soil they collected on the field trip. Have students sketch what they see and ask more questions.
- Arrange for the class to go to the same park or place from the field trip and observe the plant life in different seasons.
- Have the class plant a garden in the school ground or in the classroom, or take part in a community gardening project.
- Have the class take part in the Royal BC Museum’s “Aliens Among Us” program.
<http://alienspecies.royalbcmuseum.bc.ca/eng/content/home>
- Have groups of students interview (phone, email, Skype or in person) members of a local First Nations about traditional practices using plants in different seasons: harvest, usage (food, medicine), preservation, and storage.
 - Discuss the protocol of interviewing with the students before starting.
 - Ask your District Aboriginal Education Coordinator or resource teacher to assist you in contacting the local Aboriginal community.
<http://www.bced.gov.bc.ca/apps/imcl/imclWeb/AB.do>
- Create your own time-lapse video by having the class take a video every week for the whole school year. Connect with other classes around the province and compare your videos at the end of the year.

Assess

“Class Participation Rubric” included at the end of this unit and in *Blackline Masters* (page 31).

How Do Seasonal Changes Affect Animals and Their Habitats?

Learning Objectives

Students will:

- discuss their prior knowledge
- generate questions for inquiry
- research an animal and its habitat
- organize and analyze information
- create a visual representation of an animal in the four seasons, or
- create and act out a play about the animal in the four seasons
- reflect on their learning

Time frame

Three to four classes

Cross-curricular Connections

Science, Social Studies, Language Arts, Art, Music

Preparing For the Lesson

Gather books about BC animals for research.

Materials

Supplies

- Chart paper
- Supplies for student options:
 - Option A:** Build a model of an animal's habitat in four seasons
 - Art paper and pencils
 - 60 cm sq sheet of plywood
 - Plasticine
 - Materials for making habitat models: cotton batting (snow), blue cellophane (water), soil, twigs, rocks, and grass
(Students should accurately represent the plants in the habitat as well as the animals.)
 - Option B:** Collage of animal and its habitat in four seasons
 - Poster paper
 - Nature magazines
 - Pens
 - Pencils
 - Coloured pens
 - Paint, etc.
 - Access to Internet to print off pictures
 - Option C:** Skit of the animal in its habitat in four seasons
 - Props and costumes

Option D: Multimedia presentation of the animal in its habitat in four seasons

- Computer
- Digital camera
- Video camera

Blackline Masters

- “Animal Habitat Research Checklist” (*Blackline Masters*, pages 20–21)
- “Question Cue: Animals and Their Habitats” if online version not used (*Blackline Masters*, pages 18–19 printed back to back)

Books

- Wheeler, Jordan. *Just a Walk*. Penticton, BC Theytus Books, 2010. A young boy named Chuck goes for a simple walk and encounters animals, fish, and birds that lead him on a wild journey through their various habitats.

Online Resources

- “Question Cue: Animals and Their Habitats”
Online vocabulary game to help students generate questions for inquiry
http://www.openschool.bc.ca/elementary/my_seasonal_round/media/cue/cue_b.html

Other

- Computer access for students

Background Information

Teacher Resources

- Scholastic Education, *Healthy Habits*
The 48-page student text and 108-page teacher's guide investigate topics prescribed in the Grade 4 learning outcomes for Habitats and Communities. Processes of sciences, predicting, and interpreting are addressed in hands-on activities. Aboriginal content is embedded in the teacher's guide.
<http://education.scholastic.ca/product/9781443015790>
- *Tools for Generating Questions* on the companion website details some useful tools to help students generate, sort and refine questions.
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html
- Google Books, *Hands-On Science: Daily and Seasonal Changes* by Jennifer E. Lawson. Winnipeg. Portage and Main Press, 2001. See page 55 for animals habitat model.
http://books.google.ca/books?id=XNaYPGD97aMC&pg=PA50&source=gs_toc_r&cad=3#v=onepage&q&f=false

Student Resources

- Sierra Club BC, *Ecomap*
Check out the plants and animals of BC with this interactive map.
<http://www.sierraclub.bc.ca/education/ecomap>
- Canadian Geographic, *Animal Facts*
Explore animals and their habitats at this website.
<http://www.canadiangeographic.ca/kids/animal-facts/animals.asp>
- The Open Door Web Site, *Seasonal Changes in Animal Populations*
How do some animals adapt to the changing seasons? Read about hibernation and migration at this website.
<http://www.saburchill.com/hfns02/chapters/chap011.html>
- National Geographic Kids, *Animals and Pets*
Check out animals and their habitats around the world.
<http://kids.nationalgeographic.com/kids/animals/>
- Australian Museum, *Wild Kids – Habitats*
Interested in Australia? This website explores seven different animal and plant habitats in Australia: Coasts, Freshwater, Antarctica, Forests, Woodlands, Arid Zone and Urban.
<http://australianmuseum.net.au/Wild-Kids-Habitats>
- Pearson Education, *Fact Monster*
Find information about different habitats at this website.
<http://www.factmonster.com/dk/encyclopedia/habitats.html>

Delivering the Lesson

Access Prior Knowledge

Say to students:

In the last lesson, you explored a microhabitat and learned how plants adapt from season to season. In this lesson you will learn about how animals adapt from season to season.

Review the four things plants and animals need as part of their habitats (food and water, appropriate temperature, protection from predators, space).

Have students give examples of different animal habitats.

Inquire

1. Lead a discussion. Ask students:

- *Why are there different habitats?*
- *Why is it important to have different habitats?*
- *Why do animals live in different places?*
- *What physical characteristics and behaviours do animals have that help them survive in their habitats?*
- *How do the needs of a particular animal relate to its habitat?*

2. Read *Just A Walk*, by Jordan Wheeler.

Have students name the various habitats Chuck visits. Ask the class:

Do people have habitats?

(Human habitats vary according to individual and culture.)

3. Place four pieces of chart paper around the classroom. Title the four pieces of paper:

- Animals in Spring
- Animals in Summer
- Animals in Fall
- Animals in Winter

Record students' ideas about animal habitat and behaviour.

Ask:

How do animals' homes or habitats change during each of the seasons?

(Some birds fly south, others stay; some animals hibernate in winter e.g., bears, bats, marmots, and snails; some grow a thicker or longer coat of fur to adapt.)

4. Students generate, sort and refine questions for inquiry.

“Question Cue: Plants and Their Habitats” is a tool students can use to generate questions.

- online version on the companion website
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.htm
- paper version in *Blackline Masters* (pages 12–13)

Students can use the following tools to sort and refine their questions:

- “Sort Circle,” (*Blackline Masters*, page 3)
- “Strengthening Strategies” (*Blackline Masters*, pages 4–7)
- “Question Rater” (*Blackline Masters*, pages 9–10)

Colour copies for projection are available on the companion website.

Instructions on how to use these tools are available in *Tools for Generating Questions* on the companion website.

http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html

Examples of powerful questions:

- How does the existence of different habitats benefit all living things?
- How do living things adapt to their habitats?
- In what ways are plant and animal communities similar to human communities?
- How do animals and birds prepare for winter?
- What is adaptation?
- What are hibernation, migration, dormancy and camouflage?
- How do hibernation, migration, dormancy and camouflage help animals survive?

5. Guide students to generate questions that tie in with the seasonal round.

Examples of powerful questions:

- How would the way animals adapt in winter (hibernation, migration, dormancy and camouflage) affect how First Nations gather food in the winter?
- What animals could still be hunted for food in the winter?
- What animals could not be hunted for food in the winter?
- How does the seasonal availability of certain animals affect the lifestyle and culture of the people who depend on the animals?

6. Divide class into small groups. Using the questions students generate, have each group research one animal found in British Columbia. You may first want to discuss research skills and citing sources. Using the "Animal Habitat Research Checklist" (*Blackline Masters*, pages 20–21) students answer the following questions:
- What are the animal's habitat needs?
 - What do they eat?
 - Where do they find water?
 - How do they protect themselves from being too cold or too hot?
 - How much space do they need?
 - In what areas of the province does the animal live? Show on the map.
 - How does the animal's behaviour or body change to adapt to the changing seasons?

Have groups of students share their findings. Encourage students to revise their inquiry if they discover new information during the sharing.

Experience

Ask students to choose one of the following options to present their project. Students could also suggest an idea of their own.

Option A

Students build a model of an animal habitat in the four seasons. From: *Hands-On Science: Daily and Seasonal Changes* by Jennifer E. Lawson (p. 55)
http://books.google.ca/books?id=XNaYPGD97aMC&pg=PA50&source=gbs_to_c_r&cad=3#v=onepage&q&f=false

Option B

Students make a collage of their chosen animal habitats in the different seasons.

Option C

Students write and act out a skit of the animal in its habitat in each season. Students bring/make props and costumes.

Option D

Students create a multimedia presentation (video or photo essay) of an animal habitat in the different seasons. The presentation could include visual elements with sound or music, a PowerPoint slideshow, or a "Mashup" (combination of two or more pre-existing videos, photographic images and/or music).

Work as a class to design a self-assessment rubric before students begin working on their project.

Explore

Have students use the suggested resources below to explore the topics in this lesson. You and/or your students may find and use other resources as well.

Read

- Carol Lerner. *A Forest Year*. William Morrow & Co., 1987.
Describes how seasonal changes in a forest affect the plants and animals that live there.

Watch and Listen

- *Habitat Instructional Video*
Video 9:20 min
This video discusses the elements that animals require in a habitat.
<http://www.youtube.com/watch?v=-MQLqalP1yo&feature=related>
- *Grade 3, Theme 4, Animal Habitats*
Video 3:25 min
This video talks about the different geographic habitats (desert, forests, etc.).
<http://www.youtube.com/watch?v=zNTHVLxPP54&feature=related>
- BBC, *Nature Wildlife, Habitats*
This website explores a variety of nature habitats found all over the world including mountains, grasslands, deserts, and forests. Animals and plants found in these habitats are also discussed.
<http://www.bbc.co.uk/nature/habitats>

Try This

- Habitats for Kids, *Free Games and Activities*
Play the games and activities about habitats at this website.
<http://www.wartgames.com/themes/science/habitats.html>
- Get to Know, *Hike: Stanley Park* (virtual hike)
Explore the plants and animals of Stanley Park in Vancouver with this interactive game.
<http://hikes.gettoknow.ca/stanleypark/>
- PBS Kids, *Explore the North American Forest*
Discover the forest habitat with this interactive game.
<http://pbskids.org/wildkratts/habitats/north-american-forest/>

Reflect and Connect

As a class, revisit students' questions. Discuss what questions have been answered and if students have any new questions.

Share

When the projects are complete, each group shares with the class and answers questions from other students about their animal and its habitat. Models are displayed in the class or somewhere in the school. Students share which of the class-generated questions were answered in this project.

Go Beyond

Here are some options to help you and your students to delve deeper into the topics presented in this lesson.

- Have a biologist or someone from an environmental group speak to the class about animal and plant habitats and the loss of habitat. Have them emphasize how the students can be good stewards of the environment.
- Plan a field trip to a park; river, lake or ocean shoreline; or land conservancy.
- Show students the following video:
Qat'muk: Where the Grizzly Bears go to Dance
Ktunaxa people and others discuss the development of Jumbo Glacier in the East Kootenays.
<http://vimeo.com/31890388>
 - Have students discuss/debate development versus preserving habitat.
- Have the class visit the Royal BC Museum's Natural History Gallery and tour the coastal habitats. (Teachers are allowed a free preview visit.) Have students generate questions for inquiry while exploring this exhibit.
- Book an IMAX film (you can rent the whole theater for your class):
 - *Whales: An Unforgettable Journey*
 - *Beavers*

Assess

"Group Work Self-Assessment Rubric" included at the end of this unit and in *Blackline Masters* (page 32).

What Are the Four Geographic Regions of BC?

Learning Objectives

Students will:

- discuss their prior knowledge
- generate questions for inquiry
- research the geographic regions of BC
- reflect on their learning

Time frame

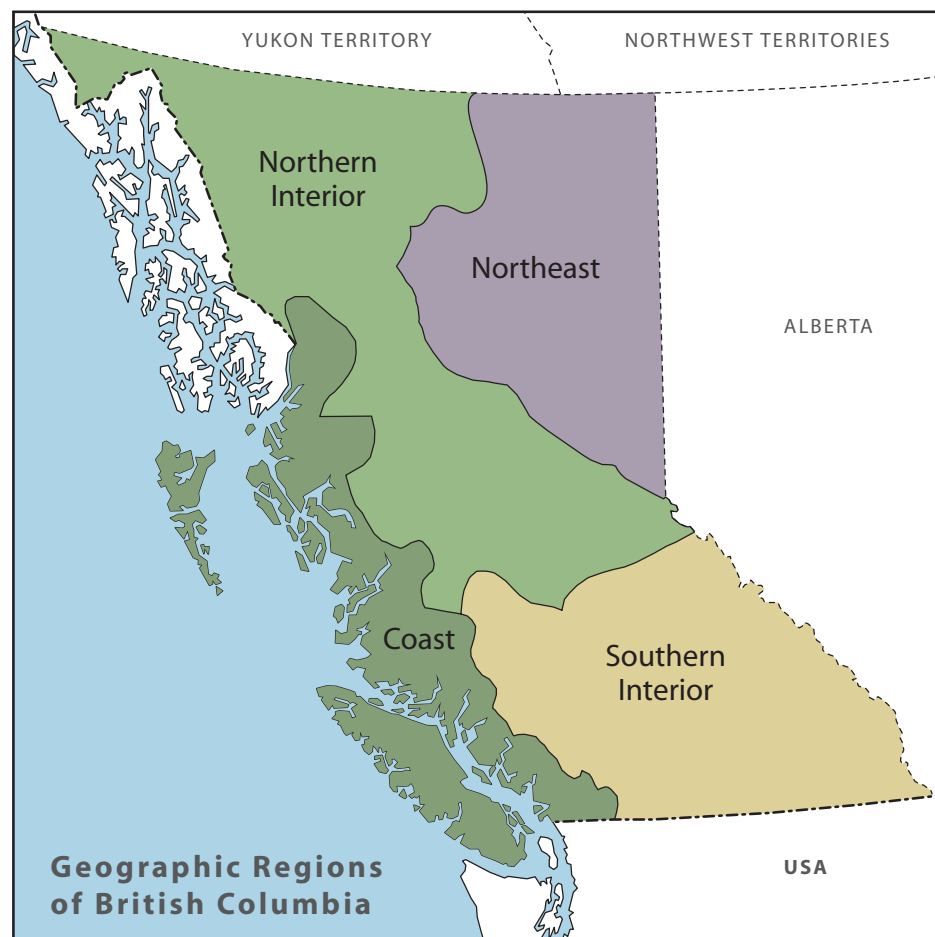
One to two classes

Cross-curricular Connections

Social Studies, Language Arts

Preparing For the Lesson

- Gather materials specifically for the geographical regions of BC. You may want to contact Tourism BC for information and resources.
- On a large sheet of poster paper or newsprint, draw a large map of BC sketching out the four main geographic regions (*Blackline Masters*, page 22).



Materials

Supplies

- Pen and paper for each student
- Four different coloured Post-it notes (for the four seasons) — enough for each group of three students

Blackline Masters

- “Map of BC Regions” (*Blackline Masters*, page 22)
- “Question Cue: Geographic Regions of BC” if online version not used (*Blackline Masters*, pages 23–24 printed back to back)
- “Pause and Ponder Journal” (*Blackline Masters*, page 1)

Online Resources

- “Question Cue: Geographic Regions of BC”
Online vocabulary game to help students generate questions for inquiry
http://www.openschool.bc.ca/elementary/my_seasonal_round/media/cue/cue_c.html

Other

- Computer and projector
- Computers with Internet access for each group of three students
- Books, posters, and videos on the geography of BC

Background Information

Teacher Resources

- Sierra Club BC, *Resources and Tools*
This website provides educational resources and tools on subjects such as Boreal forest, BC Interior Ecology, Climate Change, Temperate Rainforest Ecology, and Wild Products and Sustainable Harvesting.
<http://www.sierraclub.bc.ca/education/resources-tools>
- Natural Resources Canada, *The Atlas of Canada: Boreal Forest*
This website gives information on the boreal forest.
http://atlas.nrcan.gc.ca/site/english/learningresources/theme_modules/borealforest/index.html

Student Resources

- Super, Natural British Columbia, *Places to Go*
(regional geography, climate and weather)
Info on regions of BC: Vancouver and Coastal Mountains, Northern BC, Cariboo Chilcotin, Thompson Okanagan, Kootenay, Rockies, and Vancouver Island.
<http://www.hellobc.com/british-columbia.aspx>
- Sierra Club, *Ecomap*
Click on a region on the BC map and learn about the climate and the plants and animals that live there.
<http://www.sierraclub.bc.ca/education/ecomap>
- Wikipedia, *Geography of British Columbia*
Includes climate and biogeoclimatic zones.
http://en.wikipedia.org/wiki/Geography_of_British_Columbia
- Super, Natural British Columbia, *Climate and Weather*
This website gives information on BC's climate and weather in the four seasons.
<http://www.hellobc.com/british-columbia/about-bc/climate-weather.aspx>
- Travel BC, *Regions of British Columbia*
Find the towns and cities in BC's regions.
<http://www.travel.bc.ca/regions/>

Delivering the Lesson

Access Prior Knowledge

Say to students:

In the last lessons, you learned about habitats of plants and animals and how they adapt to the changing seasons. In this lesson you will learn about the four regions of BC and discover the different climates and geographical features in this province. You will also explore how the land changes with the seasons, and inquire how this affects the First Nations' seasonal round.

In Greek the word geography literally means "to describe Earth."

How would you describe the geography – or the landscape – of BC?

Inquire

1. Show a few short videos of scenes from around the province of BC.

<http://www.hellobc.com/british-columbia/videos-images.aspx>.

Before you show a video, point out on the map of BC the location of where the video takes place.

As they are watching the videos, ask students to write down different geographical features of the places shown (mountains, ocean, grassland, lakes, rivers, forest, etc.). You may want students to use the "Map of BC" in *Blackline Masters* (page 22).

After showing the videos, discuss the geographical features students identified.

2. Students generate, sort and refine questions.

"Question Cue: Geographic Regions of BC" is a tool students can use to generate questions.

- online version on the companion website
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html
- paper version in *Blackline Masters* (pages 23–24 printed back to back)

Students can use the following tools to sort and refine their questions:

- "Sort Circle," (*Blackline Masters*, page 3)
- "Strengthening Strategies" (*Blackline Masters*, pages 4–7)
- "Question Rater" (*Blackline Masters*, pages 9–10)

Colour copies for projection are available on the companion website.

Instructions on how to use these tools are available in *Tools for Generating Questions* on the companion website.

http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html

In their field journals, have students sort the questions into “searching” and “powerful” questions.

Examples of powerful questions:

- Why are there different landforms in the province?
- What plant and animal habitats would be found in different regions of BC?
- What living and non-living things would be found in the different habitats?
- How does climate of the different regions affect the seasonal round?
- How do the various landscapes across the province affect the seasonal round?

Experience

1. Post the Map of BC Regions on a board.
2. Divide the class into small groups. Hand out four different coloured Post-it notes to each group for the different regions of the province. Explain that each colour represents a different season. Create a legend (colour for each season) on the bottom of the map for easy reference.
3. Have groups research one “quick fact” in books, magazines, or on the Internet (see student resources) about *each* of the four geographic regions of BC. (Quick facts could include: climate and weather/average temperatures in different seasons, animals and plants that live in that region, etc.) Students write the fact on the Post-it for the season with which it fits best, and then stick it onto the map in the correct region.

Note: Keep map up for the next lesson.

4. After all the facts are posted discuss the information the students gathered. Make connection to animal habitats (which includes birds) in the various seasons, and the seasonal round. Here is an example.

Mallard ducks live in lakes and ponds all over British Columbia. During winter, most Mallards migrate to the southern United States, and as far south as northern Mexico, where most lakes and ponds stay ice-free. This fall migration usually begins in late September or October.

As part of their seasonal round, many First Nations people hunt the animals that are available in the areas where they live. Mallard ducks are a food source for many First Nations people in the spring and the summer months. However, because these birds migrate south in the fall, that food source is not available in the fall and winter. First Nations people have to find other food sources during this time.

Use other examples of plants such as berries, herbs and edible roots, that First Nations harvest in the summer, or fish such as salmon. Also discuss the preservation of food.

Explore

Have students use the suggested resources below to explore the topics in this lesson. You and/or your students may find and use other resources as well.

Watch and Listen

- Super, Natural British Columbia, *Videos and Images*
Several short videos of different regions of the province.
http://www.hellobc.com/british-columbia/videos-images.aspx_

Try This

- Canadian Geographic, *Games*
<http://www.canadiangeographic.ca/kids/games/default.asp>

Reflect and Connect

Self-check

Students write a reflection using the “Pause and Ponder Journal” (*Blackline Masters*, page 1).

Have students write three additional questions they have as a result of their initial inquiry.

Go Beyond

- Sierra Club BC, *Elementary and Middle School Programs*
This website provides information about the variety of school programs offered by the Sierra Club, including “Going Wild! Teaching about Wild Products from BC’s Coastal Temperate Rainforest (Grades 4–7).”
<http://www.sierraclub.bc.ca/education/school-programs/elementary-and-middle-school-programs>

Assess

To assess the activity and discussion, use the “Class Participation Rubric” located at the end of this unit and in *Blackline Masters* (page 31).

What Does a Seasonal Round Look Like?

Learning Objectives

Students will:

- discuss their prior knowledge
- generate questions for inquiry
- connect prior knowledge to the seasonal round
- research First Nations' seasonal round
- reflect on their learning

Time frame

Two to three classes

Cross-curricular Connections

Social Studies, Science, Language Arts, Art (Dance, Music, Drama, Visual Arts)

Preparing For the Lesson

- Research a BC First Nation in the region which the students are studying.
- If possible, arrange for an Elder or First Nation community member to speak to your class about the seasonal round, pre-contact and present day.
- Depending on the resources available, discuss with students how they will present their “living” dioramas. Some options:
 - Choose one geographic region and split students into four groups, one group for each season. Within each group, half of the students would represent the seasonal round in pre-contact time, and the other half would represent present day.
 - Allow groups to choose one geographic region and represent a seasonal round for all seasons, again including pre-contact time and present day.
- For information on present-day seasonal rounds, students may have to contact an Elder or member of the First Nations community that they are studying.
- Gather materials specifically for the First Nation communities in the geographical region(s) of BC that the class is researching.

Materials

Blackline Masters

- “Question Cue: First Nations and the Seasonal Round” if online version not used (*Blackline Masters*, pages 25–26 printed back to back)
- “Seasonal Round Research” (*Blackline Masters*, pages 27–29)
- “Map of BC First Nations” (*Blackline Masters*, page 30)

Online Resources

- Google images for dioramas (use search term “dioramas”)
- “Question Cue: First Nations and the Seasonal Round”
Online vocabulary game to help students generate questions
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.html

Other

- Computer access for student research
- Computer and projector

Background Information**Teacher Resources**

Books:

- Campbell, Kenneth, Charles Menzies, and Brent Peacock. *B.C. First Nations Studies*. BC Ministry of Education, 2003. (Especially pages 18–47.)
- Coull, Cheryl. *A Traveller’s Guide to Aboriginal B.C.* Vancouver: Whitecap Books, 1996.
This book explores the aboriginal stories, places, and landscapes of British Columbia, delving into the history and traditions of the eleven major linguistic groups.

Online:

- LearnNowBC, *Encyclopedia of British Columbia – First Nations of BC*
Good resource on the individual First Nations Peoples in BC.
- Ministry of Education, *First Nations Peoples Map of BC*
<http://www.bced.gov.bc.ca/abed/map.htm>
- Sierra Club BC, *Resources and Tools*
A variety of educational resources – especially relevant is:
<http://www.sierraclub.bc.ca/education/resources-tools>
- Sierra Club BC, Elementary and Middle School Programs: *Going Wild! Teaching about Wild Products from BC’s Coastal Temperate Rainforest (Grades 4–7)*. Available through ERAC.
<http://www.sierraclub.bc.ca/education/school-programs/elementary-and-middle-school-programs/going-wild-teaching-about-wild-products-from-bc2019s-coastal-temperate-rainforest-4-7>
- Aboriginal Affairs and Northern Development Canada, *About BC First Nations*
This website provides much information on BC First Nations including maps and links to organizations.
<http://www.aadnc-aandc.gc.ca/eng/1100100021009/1314809450456>

- Province of BC, *A Guide to Aboriginal Organizations and Services in British Columbia 2011/2012*
This PDF lists Tribal Councils/Affiliations across BC and their websites for contact information.
http://www.gov.bc.ca/arr/services/down/guidetoservices_2011.pdf

Student Resources

Books:

- Carlson, Keith Thor (ed). *A Stól:lō: Coast Salish Historical Atlas*. Toronto, Douglas & McIntyre, 2006.
This superbly researched, groundbreaking historical atlas presents a history of the civilization and territory of the Stól:lō, a First Nations people. Through words, archival photographs, and 86 full-colour maps, the book details the mythic beginnings of the Stól:lō people and how white settlement turned their homeland into the bustling metropolis of Vancouver.
- Patent, Dorothy. *Garden of the Spirit Bear: Life in the Great Northern Rainforest*. Clarion Books, 2004.
A unique type of black bear, called the Spirit Bear by the native peoples of the northern Canadian Pacific Coast, lives in a region of green grasses, cedar trees, and colourful wildflowers, but pressures from the outside world threaten the Spirit Bear's home.
- Isaac, Michael. *How the Cougar Came to be Called the Ghost Cat*. Roseway Publishing, 2010.
A little cougar struggles to be accepted in two very different worlds, just as First Nations people do.
- Challenger, Robert. *Raven's Call and More Northwest Coast Stories: Learning from Nature and the World Around Us*. Heritage House, 1997.
A collection of short stories, told in the storytelling manner of First Nations that uses animal characters and their experiences to convey lessons on values of respect, cooperation and kindness.
- Brandenburg, Jim. *Face to Face with Wolves*. National Geographic Children's Books, 2008.
Photographer Jim Brandenburg has observed lone wolves by moonlight, Arctic wolves leaping onto ice floes, and wolves hunting and foraging for food. The author makes a case for the protection of this threatened species, and shows how wolves and humans can live together.

- Landon, Rocky. *A Native American Thought of It: Amazing Inventions and Innovations*. Annick Press, 2008.
Explores eight different categories in which the creativity of First Nations peoples from across the continent led to remarkable inventions and innovations, many of which are still in use today.
- Bouchard, Dave; Vickers, Henry. *The Elders are Watching*. Raincoast Books; 5th Revised edition, 2003.
Poet David Bouchard and First Nations artist Roy Henry Vickers collaborate to revere the nature of Canada's rugged West Coast with lyrical, thoughtful poetry.
- McAllister, Ian; Read, Nicolas. *The Sea Wolves: Living in the Great Bear Rainforest*. Orca Book Publishers; 1 edition, 2010.
Introduces the sea wolves that live in the Great Bear Rainforest of British Columbia, describing their pack behaviour, life cycle, and the animals they hunt in the Canadian coastal environment.

Online:

- BC Archives, Time Machine: *First Nations in British Columbia*
This website has photographs and information on the history of BC First Nations.
<http://www.bcarchives.gov.bc.ca/exhibits/timemach/galler07/frames/index.htm>
- *The Canadian Encyclopedia (First Nations)*
This online encyclopedia has articles and photographs of First Nations in Canada.
<http://www.thecanadianencyclopedia.com>
- Super, Natural British Columbia, *Aboriginal Culture in British Columbia*
Video 4:32 min
This short video talks about Aboriginal Cultures across the province of BC.
<http://www.youtube.com/watch?v=BtYHZWbw4hA>
- First Nations in British Columbia, *First Nations Communities in BC*
A comprehensive list of First Nations Communities in BC including contact information.
http://fnbc.info/FirstNations_Communities_in_bc
- Ministry of Aboriginal Relations and Reconciliation, *First Nations by Region*
Interactive map to locate BC First Nations by region.
<http://www.gov.bc.ca/arr/treaty/regional.html>

- First Nations Education Council, School District 73,
Resource Gathering, Seasonal Round Stsillen
This website discusses the seasonal round of the Secwepemc First Nations (Southern Interior).
http://secwepemc.sd73.bc.ca/sec_village/sec_round.html
- Okanagan First Peoples, *Sylx Perspective on Ecology*
This website has information about the seasonal calendar of the Okanagan First Nation. You will learn to say seasonal words in the Okanagan language.
<http://www.okanaganfirstpeoples.ca/ecology.cfm>
- Aboriginal Tourism Association of BC,
Discover British Columbia Through the Eyes of Its Aboriginal People
Designed mostly to promote tourism, this website highlights different First Nations in the province of BC, including short videos.
<http://www.aboriginalbc.com/>
- BC Association of Aboriginal Friendship Centres,
Friendship Centres of BC
A map showing BC Aboriginal Friendship Centres across the province including contact information.
<http://www.bcaafc.com/bc-friendship-centres>
- 500 Nations, *British Columbia First Nations*,
BC First Nations and contact information.
http://500nations.com/British_Columbia_Tribes.asp

Delivering the Lesson

Access Prior Knowledge

Say to students:

You have studied four geographical regions of BC and made connections to plants, animals and habitats in those regions, as well as how plants and animals in various regions relate to the seasonal round. In this lesson you will explore how First Nations people adapt to the seasons by carrying out a seasonal round.

Review the concept of a seasonal round from Lesson 1.

Inquire

1. Looking at the Map of BC from Lesson 4 with the Post-it “quick facts,” have students predict what a seasonal round might look like in each region in pre-contact time and in the present day. Consider the following:

- Transportation
 - pre-contact: on foot, canoe
 - present day: truck, snowmobile
- Food (hunting, fishing, harvesting plants, preserving food)
- Shelter (shelters in pre-contact time versus shelter in present day)
- Resources (to make clothing, footwear, baskets, and tools)

Lead a discussion. Ask students:

- *What animals would be hunted for food?*
- *What plants or berries could be harvested?*
- *Are there fish available?*
- *How does the landscape of the region affect the seasonal round?*
- *What would the weather be like in each season?*
- *What shelter would people need?*
- *What materials might they use to build shelter?*
- *How do people travel from one place to another?*
- *What resources would need to be harvested to make clothing, footwear, baskets, tools, etc.?*
- *How might First Nations groups celebrate the seasons?*

2. Tell the class that the final project for the unit will be a living diorama of a seasonal round.
 - Google search images for dioramas and project them for the students.
 - Ask students what a living diorama might include (things to touch, see, hear, taste).
 - Offer students options for their diorama presentations.

Examples

- write and perform a skit, role play, tableau, or dialogue
 - write and illustrate a picture book on the seasonal round
 - write and perform a song and/or dance
 - create and/or collect artifacts
 - make costumes
 - cook food
 - make tools
 - create and project multimedia (photos, videos, PowerPoint, etc.)
- Tell students that when the living dioramas are finished, they will share what they have learned with parents, and possibly other students in the school.
 - Decide with the students how the class will present the seasonal round: one region with each group choosing one season, or four regions with each group presenting all four seasons. Keep availability of resources in mind.
 - Divide the class into groups for the living diorama project.
3. Remind students of the unit focus questions:

You are a member of a BC First Nations (specific FN to be determined). You've been selected by your band to live one seasonal round with your ancestors in pre-contact time. When you return to the present, you'll need to report back to your band. You'll also have to decide whether to stay in the present or return to live with your ancestors. To decide, you'll need to answer these unit focus questions:

- *How is the seasonal round you live through in the present day different from that of your pre-contact ancestors?*
- *What time period would you prefer to live in and why?*

Each group will answer these questions for themselves by completing the research and creating the living diorama. Tell students that when they present their living dioramas, they will answer the unit focus questions with evidence to support their conclusion.

Students' interests and passions about seasons, animals, plants, etc. direct this inquiry with guidance from the teacher. Have students construct questions that will help them research information for their living dioramas and answer the unit focus questions above.

Students generate, sort and refine their questions.

“Question Cue: First Nations and the Seasonal Round” is a tool students can use to generate questions.

- online version on the companion website
http://www.openschool.bc.ca/elementary/my_seasonal_round/teacher_area.htm
- paper version in *Blackline Masters* (pages 25–26 printed back to back)

Example questions

- What does the seasonal round look like for different First Nations groups in different parts of BC?
- Why was the seasonal round important?
- Was it more important for some First Nations than others?
- Was it more important in pre-contact time or in the present day?
- How does it affect the lives of the First Nations communities in BC today?
- What can we do to make sure that First Nations communities are able to continue the seasonal round today?

Experience

1. Have students sort their questions into “searching” and “powerful” questions and then choose five questions that are meaningful to them. Remind students that these five questions should help them answer the unit focus questions.
2. Divide class into groups. Have members of each group share and discuss their questions.
3. Other groups (or the whole class) provide(s) constructive feedback to make the questions more “powerful.” Discuss which questions will be the best to research for the living dioramas.

Let students know that once you approve their questions, they will begin their living diorama research using the “Seasonal Round Research” (*Blackline Masters*, pages 27–29).

Note: You and/or the school librarian may want to give the class a mini-lesson on research skills, help groups with prompts for web researches, and show them what resources are available in the classroom and school library.

Explore

Have students use the suggested resources below to explore the topics in this lesson. You and/or your students may find and use other resources as well.

Read

- First Nations Education Council, School District 73.
Resource Gathering, Seasonal Round Stsillen (Secwepemc First Nation).
This website discusses the seasonal round of the Secwepemc First Nations (Southern Interior).
http://secwepemc.sd73.bc.ca/sec_village/sec_round.html
- Cultural Survival, *Wild Food in its Season: The Seasonal Round of Harvest Activities in Fort Yukon.*
This site takes the reader through a present day seasonal round with the Athabaskan First Nations of Fort Yukon, Alaska.
<http://www.culturalsurvival.org/publications/cultural-survival-quarterly/united-states/wild-food-its-season-seasonal-round-harvest-a>

Watch and Listen

- *Secwepemc Seasonal Round (Student Project)*
Video 1:37 min
<http://www.youtube.com/watch?v=3Ulk2wYcdm8>
- *Cedar Weaving – Squamish Lil'wat Cultural Centre*
Video 2:59 min
Women from the Squamish Lil'wat Cultural Centre give a demonstration of weaving cedar for rope, mats, clothing, and baskets and discuss types of cedar and how and when cedar is harvested (Coast Region).
<http://www.youtube.com/watch?NR=1&feature=endscreen&v=Ybfaf2pQJ4U>
- *Pit House (Istken) – Squamish Lil'wat Cultural Centre*
Video 0:52 min
A discussion of pit house construction and use at the Squamish Lil'wat Cultural Centre (Coast Region).
<http://www.youtube.com/watch?v=Z4Kf382lpA0&feature=relmfu>
- *Connecting With the Creator's Creatures*
Video 1:17 min
<http://www.youtube.com/watch?v=-Qq5V5IZccQ&list=UUwjFRiWO0fdoQZ9Qdes5OWw&index=6&feature=plcp>

- *Summer Home Materials*
Video 2:24 min
A Secwepemc Elder discusses the materials and process of making a summer home (Southern Interior).
<http://www.youtube.com/watch?v=H1GwODsJgSg&feature=related>
- *Tanning a Hide*
Video 3:26 min
How to tan animal hide.
<http://www.youtube.com/watch?v=jUWapxnhxgA&feature=endscreen&NR=1>
- *Making Moccasins*
Video 3:08 min
How to make moccasins.
<http://www.youtube.com/watch?v=hIARJSaWb2E&feature=relmfu>
- *Through the Eyes of Elders, The Adams River Salmon Run*
Video 2 min
Secwepemc Elder talks about his connection to nature and how the salmon play a big part in his culture home (Southern Interior).
<http://www.youtube.com/watch?v=pMO4psH5tTU&feature=related>
- *Smoking Salmon*
Video 7 min
A Neskonlith Elder shows how to prepare salmon.
<http://www.youtube.com/watch?v=rYTUUOsby1g&feature=relmfu>
- *Native Perspectives of Sustainability, Importance of Salmon*
The importance of salmon to Aboriginal people.
<http://www.nativeperspectives.net/loadvid.php?watch=RStzD3Rhex4>
- *Welcome to Gitannmaax in Gitxsan Territory*
Video 12 min
About the Gitanmaax First Nations who live near Hazelton, BC.
<http://www.youtube.com/watch?v=-OzrrYEISTI>

Reflect and Connect

Self-check

Students write down ideas they have for their living dioramas using the “Pause and Ponder Journal” (*Blackline Masters*, page 1).

Investigate and Present

Research

Plan classes for different activities:

- Collecting images
- Researching “facts” – websites, books, news articles, videos, etc.

Conduct progress checks for each group, and class as a whole. The sharing and reflection will drive “mini lessons” on content, process, and product to assist individuals, groups, or the whole class.

Possible mini-lesson content:

- Use of land/resources
- Weather patterns – change over seasons
- A variety of aspects of the habitat – animal, plant, weather, sun, soil, etc.
- Habitats from different regions of BC
- Connection between living things and
 - other living things
 - non-living things
- How weather affects plants that grow in a region
- How the type of plant affects the type of animals that live in a region

Informal Assessment

Sharing and reflection each day.

Ask students:

- *What have you found?*
- *How does it relate to what others found?*
- *What challenges are you facing?*
- *What are you excited about? And why?*
- *What do you need to do next?*
- *What changes do you need to make to your plan?*

Continued Work on Living Dioramas

Students continue to work on living diorama (sorting images, making costumes, rehearsing skit, painting scenery, making a model, etc.) and share their findings. Teach mini-lessons on relevant topics as they arise.

Set up “temperature checks” where students share progress, collect feedback (self-reflection, peer evaluation, teacher feedback) and refine their product.

Informal Assessment

Sharing and reflection each day.

Ask students:

- *What have you found?*
- *How does it relate to what others found?*
- *What challenges are you facing?*
- *What are you excited about? And why?*
- *What do you need to do next?*
- *What changes do you need to make to your plan?*

Present

Final Day: Sharing Living Dioramas

Students share their living dioramas with parents, other students, and possibly community members.

Students answer the unit focus questions:

How is the seasonal round you live through in the present day different from that of your pre-contact ancestors? What time period would you prefer to live in and why?

Students back up their answers with evidence from their research.

Post Project: Key Questions

Use the questions below, or others, to encourage students to reflect on their learning.

- *What was the value to me of learning about the seasonal round?*
- *How can I use what I learned?*
- *Why was this process important?*
- *What have I learned about myself as a learner?*
- *How can I live my life with more honour and respect for others and the environment?*
- *What questions do you have now? What new questions have been triggered?*

Concluding Assessment

“Living Diorama Presentation Rubric” and “Pause and Ponder Journal Entry Rubric” included at the end of this unit and in *Blackline Masters* (pages 33– 34).



Class Participation Rubric

	Exceeds Expectations	Meets Expectations	Approaches Expectations	Needs Work
Contribution	Contributes to class discussion offering insightful ideas and asking clarifying and meaningful questions to extend understanding. Takes risks by initiating discussion and asserting opinions.	Regularly makes meaningful and clarifying contributions to class discussion; sometimes offers ideas, asks questions and offers opinions.	Contributes to class discussion when prompted. Seldom offers ideas or ask questions.	Rarely makes meaningful contributions to class discussion or offer ideas or ask questions.
Listening	Listens actively to others both in groups and in class discussions. Respects others opinions. Incorporates or builds off ideas of others.	Listens to others both in groups and in class discussions. Respects other opinions.	Listens to others at times, but may be sidetracked easily.	Rarely listens when others talk both in groups and in class. May inhibit others speaking.
Attitude	Consistently exhibits a positive, supportive attitude towards classmates and the subject matter. Takes an active role in own learning.	Generally exhibits a positive, supportive attitude towards classmates and the subject matter. Frequently takes an active role in own learning.	Sometimes exhibits a positive, supportive attitude towards classmates and the subject matter. Sometimes takes an active role in own learning.	Rarely exhibits a positive, supportive attitude towards classmates and the subject matter. Rarely takes an active role in own learning.



Group Work Self-Assessment Rubric

	Exceeds Expectations	Meets Expectations	Approaches Expectations	Needs Work
Working Together	Our group successfully worked together to complete all the tasks. We collaborated [worked together] to plan and any disagreements were discussed and solved fairly.	Our group successfully worked together to complete all the tasks. We needed some help planning and had some disagreements that others needed to help us to solve.	Our group was not always able to work together successfully. Others had to frequently help our group plan and solve disagreements.	Rarely makes meaningful contributions to class discussion or offer ideas or ask questions.
Quality of work	In my opinion, we did our best work on this project.	In my opinion, we did our best work most of the time, with a few exceptions.	In my opinion, this was not our best work.	Rarely listens when others talk both in groups and in class. May inhibit others speaking.
Contributions	Everyone in the group contributed equally on this project.	Most of the people in the group contributed to this project.	Only a few of the group members contributed to this project.	Rarely exhibits a positive, supportive attitude towards classmates and the subject matter. Rarely takes an active role in own learning.
Group Success	Overall our group was very successful working together to complete the project.	Overall our group was successful working together most of the time.	Overall our group was successful working together some of the time.	



Living Diorama Presentation Rubric

	Exceeds Expectations	Meets Expectations	Approaches Expectations	Needs Work
Knowledge	The diorama demonstrates a thorough knowledge of the subject investigated.	The diorama demonstrates good knowledge of the subject investigated.	The diorama demonstrates a basic knowledge or beginning understanding of the subject investigated.	The diorama demonstrates very little of the knowledge of the subject investigated.
Style and Organization	Display is interesting and attractive. Materials are complete and organized and exceptionally well presented.	Display is interesting and attractive. Materials are complete and well organized. Presentation has both sequence and plan.	Some parts of the display are interesting and some materials are complete and organized. Presentation has some sequence and plan.	Display is uninteresting, lacks interest and is untidy. Materials are incomplete and unorganized. Presentation has little or no sequence and plan.
Visual Design	All images, models, costumes, etc. are used to create a meaningful presentation.	All images, models, costumes are effective, but there appear to be too few or too many.	Some images, models, costumes are effective.	Too few images, models, costumes are used to be an effective presentation.
Creativity and Appearance	Project is creative, excellently displayed and reflects originality.	Good creative effort. Project is neat and shows evidence of time spent on it.	Some creative attempt is made. Project is neat.	Little creative effort. Project has a careless appearance.
Presentation	Living diorama is presented in a highly engaging manner where all group members are enthusiastic and participate equally.	Living diorama is engaging. Most group members are enthusiastic and participate equally.	Living diorama is somewhat engaging. Not all group members appear enthusiastic or participated equally in the presentation.	Living diorama does not engage audience. Only a few group members had an active in the presentation.



Pause and Ponder Journal Entry Rubric

	Exceeds Expectations	Meets Expectations	Approaches Expectations	Needs Work
Critical Thinking	Demonstrates exceptional analysis, originality and insights	Demonstrates very good critical thinking skills with analysis, originality and insights	Demonstrates some evidence of critical thinking but with little analysis and originality	Demonstrates very little evidence of critical thinking skills with little or no analysis and originality
Development of Ideas	Well-developed thoughts, ideas, and details which show evidence of reflection, incorporation of new ideas, and an excellent grasp of concepts	Expresses thoughts and ideas with reasonable development. Reflects on new ideas and shows a good grasp of new concepts	Expresses basic thoughts and ideas and shows some ability to reflect and understand new concepts	Lacks detail; shows little evidence of reflection.
Mechanics	Exceptionally well written, clear organization, uses correct grammar, contains minor, if any, spelling errors	Well-written and well-organized, contains some grammatical and spelling errors that do not interfere with understanding	Shows some organization but the writing contains many grammatical and spelling errors	Not written in an organized manner. The grammatical and spelling errors make it difficult to understand

