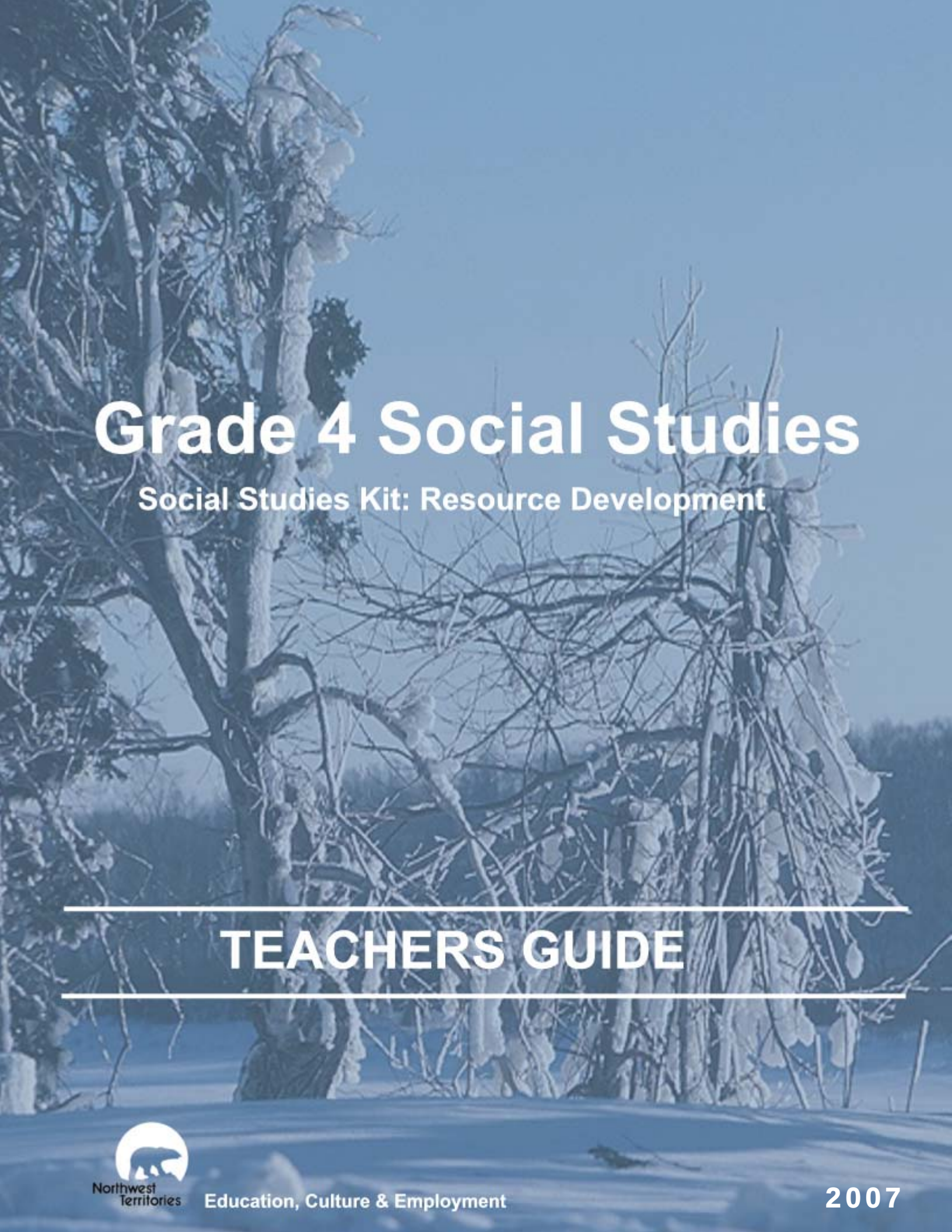


Grade 4 Social Studies

Social Studies Kit: Resource Development

TEACHERS GUIDE

Northwest Territories
Education, Culture & Employment
2007

Introduction
Grade 4 Social Studies Kit: Resource Development

The Northwest Territories is rich in both renewable and non-renewable resources. This bounty presents a critical challenge—to what extent should these resources be developed? This kit offers opportunities to explore key Social Studies curricular outcomes through the study of the natural features and historical uses of these resources. Contemporary issues of mineral development and its impacts on the environment and society are explored by viewing 'the land' through a needs/wants lens of meeting our needs. The extent to which our resources need protecting by way of 'special place' designation is also explored.

Photo Credit – Blake Wile

Eddie Weyallon sharing the resources of the land

Credits

The Department of Education, Culture and Employment would like to express its thanks to the many people who contributed to the development of this teaching resource

Many people have shared their time and talents during the development of the teaching resources which support the new Grade 4 Social Studies curriculum (2007). This development has involved northern Elders, educators, staff from the Department of Education, Culture and Employment, The Prince of Wales Northern Heritage Centre, artisans and interested individuals. We would like to express our thanks to all of these people, in particular the following:

Mindy Willett - Cranberry Consulting, Blake Wile, John Stewart, Gayla Meredith, Grade 4 Pilot Teachers (Brenda Johnson, John Cain, Gizelle Gaudon, Melissa Davis, Mayvis Arey, Steve Elms, Lori Robinson, Leanne Lawley, Julie Snow), Myrna Pokiak, Martin Dubeau, Paulette Ollerhead, Wendy Stephenson, Leon Andrew, Richard Andrew, Deborah Simmons, Alfred Taniton, Andy Norweigian, Jessie Campbell Alestine Andre, Billy Clarke, William Firth, Rosa Mantla, Sibet Biscaye, Margaret Erasmus, Gladys Norwegian.

We would like to offer a particular word of thanks to Bob Worsley for his contributions to the formatting of these documents.

Table Of Contents

If you complete the Suggested Activities in this **NWT Resource Development Kit** you will touch upon the following Grade 4 Social Studies outcomes.

Note: The activities provide numerous cross-curricular integration opportunities, which are not listed here. Teachers may wish to check and see if they are interested in focusing on other areas such as Dene Kede, Inuuqatigiit, Mathematics, Science and English Language Arts throughout this unit.

Skills and Processes

Social Participation

Students will…

4-S-001	assume a variety of roles and responsibilities in groups
4-S-002	participate in making and carrying out group decisions
4-S-003	accept and offer constructive suggestions in order to build consensus and compromise
4-S-004	collaborate with others to devise strategies for dealing with problems and issues
4-S-006	make decisions that reflect care, concern, and responsibility for the environment

Communication

Students will…

4-S-007	listen respectfully to the accounts and points of view of others
4-S-007A	listen respectfully to stories and points of view of Elders
4-S-008	use language that is respectful of human diversity
4-S-009	express reasons for their ideas and opinions
4-S-010	present information and ideas using oral, visual, material, print or electronic media appropriate to specific audience
4-S-011	use a variety of communication methods to interact with others (presentations, email, information exchange with another class, power point presentations, letters, posters, etc)
4-S-012	take notes on graphic organizers
4-S-013	use illustrations, charts and graphs to support written work
4-S-014	edit and revise written work

Creative and Critical Thinking

Students will…

4-S-015	formulate questions for inquiry
4-S-017	observe and describe material and visual evidence for research*, e.g. artifacts*
4-S-018	consider advantages and disadvantages of solutions to problems, e.g. environmental impact of resource development
4-S-019	draw conclusions based on information from a variety of sources

4-S-020 evaluate personal assumptions based on new information and ideas

4-S-021 reflect on how stories of other times and places connect to their personal experience

4-S-022 demonstrate an understanding that ways of living reflect values

Managing Ideas and Information
Students will…

4-S-023 organize and record information and information sources using a variety of formats, e.g. *charts, maps, concept maps, bibliographies*

4-S-024 create timelines or other visual organizers to sequence and represent historical figures, relationships or events – explain historical context of key events of a given time period

4-S-025 use cardinal and intermediate directions, colour contour maps and simple grids to locate and describe places, resources and regions on maps of the NWT, Canada and the world, including globes

4-S-026 construct and interpret maps that include a title, a legend, a scale, a compass rose and grids

4-S-028 identify on a variety of maps the location of sources of non-renewable resources (fossil fuels, minerals etc.)

Theme 1 - Canada and the NWT- The Land and People

Values and Attitudes

Citizenship
Students will…

4-K-C-002 describe personal experiences, events, or places that have made them feel connected to Canada and the NWT

The Land: People and Places
Students will…

4-K-L-004 identify on a map the territories, provinces, and capital cities of Canada

4-K-L-005 identify on a map or globe the equator, the prime meridian, and the hemispheres

4-K-L-006 describe the location of our territory in relation to Canada and the world using cardinal directions, hemispheres.

4-K-L-008 identify on a map the major lakes, rivers and communities of the NWT

4-K-L-009 locate traditional areas of Aboriginal peoples and language groups on a map of the NWT

Theme 2 - Beginnings and Traditions

Culture and Community
Students will…

4-V-C-002 demonstrate fairness and respect in their interactions with others

4-V-C-002A demonstrate respect in their interactions with others and their world

Identity
Students will…

4-V-I-003 value their cultural, social and Northern identities.

4-V-I-004 value the First Peoples of this land

4-V-I-004A value their Dene, Inuvialuit or Inuinnait identities

4-K-I-011 demonstrate an understanding of a variety of stories related to the origins of people in the NWT

The Land: People and Places
Students will…

4-K-L-012 demonstrate awareness of Aboriginal peoples' traditional relationships with the land and each other

4-K-L-012A demonstrate understanding of how the land determined the roles, identities, values, beliefs, traditions, activities, customs, art, transportation, technologies, shelters and clothing of First Peoples

4-K-L-013 demonstrate understanding of the origins, meanings and stories connected to a variety of places in their territory.

Time, Continuity and Change
Students will…

4-K-T-016 demonstrate understanding of different periods of time using appropriate terms or languages. *eg, Dene, Inuvialuit seasons, decade, generation, century, when the earth was new, in the time of our ancestors)*

4-K-T - 017 demonstrate an understanding of traditional ways of life (including roles and approaches to learning)

Power and Authority
Students will…

4-V-P-007 demonstrate willingness to take on leadership roles and responsibilities

Economics and Resources
Students will…

4-V-E-008 demonstrate respect for the land

4-K-E-019 demonstrate understanding of how the land was traditionally used by the people of the NWT and where particular resources were found in your region (fish, caribou, medicines, tool materials, etc)

Theme 3- Continuity and Change in the NWT

The Land, People and Places
Students will…

4-V-L-010 appreciate how changing ways of relating to the land affected the way people lived (ie: animals which had been used primarily for food, clothing and shelter becoming a source of income)

Time, Continuity and Change
Students will…

4-K-T-024 demonstrate awareness of key people, events and processes that shaped their territory

4-K-T-026 demonstrate awareness that accounts of the past may vary according to different perspectives

4-K-T-027 give examples of how technology has changed ways of life in the NWT

4-K-T-029 demonstrate awareness of the stories of people who participated in the fur trade (Thanadalthur, Knight, Steinbruck, trading chiefs, Nuligak)

4-K-T-030 demonstrate awareness of the stories of people who participated in whaling (Nuligak, traditional whaling, commercial industry of Herschell Island)

4-K-T-031 demonstrate awareness of the changing modes of transportation *(ie: skin boats, spruce canoe, birch canoe, skidoo, float plane, motor boat)*

4-K-T-035 demonstrate awareness of the stories of people who participated in resource discovery and development in the NWT *(ie: Nineye, Phipke, LaBine, Angulalik, Baker)*

4-K-G-035 identify ways in which the peoples of our territory were and are connected to other peoples and other parts of the world, *e.g. circumpolar peoples and countries, languages, travel, jobs, resources)*

Theme 4 - Living in the NWT

Citizenship
Students will…

4-K-C-038 explain from a personal perspective what it means be a citizen of the NWT and Canada

4-K-C-039 identify days and times of the year that are important to people in the NWT (ie. solstice, equinox, Dene and Inuvialuit seasons)

Identity
Students will…

4-V-I-012 value their identity as citizens of the NWT

4-K-I-040 demonstrate awareness of the importance of culture and community in shaping who they are

4-K-I-041 demonstrate understanding that their identities are shaped by living in a Northern environment (*ie: climate, housing, clothing, recreation, transportation, food, relationships with the land, treaties*)

Culture and Community
Students will…

4-V-CC-013 appreciate the cultural diversity now present within our territory

4-K-CC-044 describe how First Nations, Inuit, Métis and other peoples have helped shape our territory (see NWT History Timeline, Prince of Wales Heritage Centre Online Time Line*)*

4-K-CC-047 identify contemporary diverse cultural communities and describe how they have helped shape our territory

The Land: Places and People
Students will…

4-K-L-049 demonstrate an awareness of different perspectives on land use in the NWT (ie: traditional relationship with the land as provider; economic understanding of land as resource)

4-K-L-050 demonstrate an understanding of why certain places have been designated as Protected Areas in the NWT (ecological, species, cultural/historical,)

4-K-L-051 demonstrate an understanding of how certain places have been designated as Protected Areas in the NWT (traditional knowledge, land use plans, land claims, national parks, NWTPAS)

Economics and Resources

Students will…

4-V-E-015	Appreciate how the choices people make about the way they want to live affects the kinds of work they do.
4-K-L-052	identify NWT renewable and non-renewable resources
4-K-L-053	demonstrate an understanding of both the positive and negative impacts of resource development on the NWT in regards to economic, social, environmental, educational, technological and global connections
4-K-E- 054	explore different ways that people earn their living in the NWT (*ie: hunting, trapping, fishing, mining, government, transportation, services)*

Unit 1: The Land Provides

Knowledge and Values Learning Outcomes

Students will become familiar with the seasonal land activities, different land values and have an understanding that the land provides both renewable and non-renewable resources.

If you complete Unit 1, you will have explored the following outcomes:

Skills and Processes

Social Participation

4-S-006 make decisions that reflect care, concern, and responsibility for the environment

Communication

4-S-008 use language that is respectful of human diversity

4-S-009 express reasons for their ideas and opinions

Creative and Critical Thinking

4-S-021 reflect on how stories of other times and places connect to their personal experience

4-S-022 demonstrate an understanding that ways of living reflect values

Theme 1 - Canada and the NWT- The Land and People

Values and Attitudes

Citizenship

4-K-C-002 describe personal experiences, events, or places that have made them feel connected to Canada and the NWT

Theme 2 – Beginnings and Traditions

Culture and Community

4-V-C-002 demonstrate fairness and respect in their interactions with others

4-V-C-002A demonstrate respect in their interactions with others and their world

Identity

4-V-I-003 value their cultural, social and Northern identities

4-V-I-004 value the First Peoples of this land

4-V-I-004A value their Dene, Inuvialuit or Inuinnait identities

4-K-I-011 demonstrate an understanding of a variety of stories related to the origins of people in the NWT

The Land: People and Places

4-K-L-012 demonstrate awareness of Aboriginal peoples' traditional relationships with the land and each other

4-K-L-012A demonstrate understanding of how the land traditionally determined the roles, identities, values, beliefs, traditions, activities, customs, art, transportation, technologies, shelters and clothing of First Peoples.

4-K-L-013 demonstrate understanding of the origins, meanings and stories connected to a variety of places in their territory.

Time, Continuity and Change

4-K-T-016 demonstrate understanding of different periods of time using appropriate terms or languages. *eg, Dene, Inuvialuit seasons, decade, generation, century, when the earth was new, in the time of our ancestors)*

4-K-T - 017 demonstrate an understanding of traditional ways of life (including roles and approaches to learning)

Theme 3- Continuity and Change in the NWT

The Land, People and Places

4-V-L-010 appreciate how changing ways of relating to the land affected the way people lived (ie: animals, which had been used primarily for food, clothing and shelter becoming a source of income)

Theme 4 - Living in the NWT

Citizenship

4-K-C-039 identify days and times of the year that are important to people in the NWT (ie. Solstice, equinox, Dene and Inuvialuit seasons)

The Land: Places and People

4-K-L-049 demonstrate an awareness of different perspectives on land use in the NWT (ie: traditional relationship with the land as provider; economic understanding of land as resource)

Economics and Resources

4-V-E-015 appreciate how the choices people make about the way they want to live affect the kinds of work they do

4-K-L-052 identify NWT renewable and non-renewable resources

4-K-E-054 explore different ways that people earn their living in the NWT (ie, hunting, trapping, fishing, mining, government, transportation, services).

Background Context for the Teacher

The NWT is rich in both renewable and non-renewable resources. **Non-renewable** resources are often described as those which can not be replaced within a human life-span such as rocks and minerals. **Renewable** resources are those which can be replaced in a human life span such as trees and other plants and animals but also include the sun, wind and water which are available continuously.

In some texts written from a certain world view non-renewable resources may be defined as non-living resources while renewable resources are those resources which were once living. If you come across this definition discuss this with the class. In *Dene Kede* we are taught that rocks are alive too and this should be discussed in your classroom. Community resource people may be able to help you in this discussion. This is also an opportunity to discuss the meaning of worldview with your students.

Although the majority of this module will deal with non-renewable resource development, it is important for students to understand the difference and that the NWT has a healthy renewable resource economy. For more information on the renewable economies of the NWT refer to the Dene/ Inuvialuit Way of Life and the Fur Trade kits.

Materials

- Chart paper and markers
- Needs and Wants hand-out
- Seasonal Round hand-out
- Story of Life on the land in the 1950's by Noel Andre

Vocabulary

- Seasonal
- Land use
- Value
- Renewable
- Non-renewable
- Worldview

Opener: Land Uses

To get your students thinking about the different values the land has for people complete the following;

1. Form a circle on the floor with your students

2. In the middle of the circle place chart paper and some different coloured markers.

3. On the chart paper write, 'What do you get from the land that is important to you?' They should each have one marker to write at least one thing on the chart paper. Prompt them with food (they can list many different types of food), shelter, water, materials for construction, minerals, oil and gas etc.

4. Try to get them to think about abstract things such as a place to be alone, for quiet or a space to go camping or oxygen to breathe as the land does provide that for us.
5. Post the list as you will need it to refer to in following activities and when you discuss land use values in later units.

Connector: Renewable and Non-renewable Resources

1. Make a T-Chart on the blackboard with the words non-renewable and renewable on each side of the T. Review the definitions of these words with your students.

2. Revisit the chart paper with the things that they mentioned that the land provides. Have the class sort the things the land provides into non-renewable and/or renewable.

3. Discuss with the students that Canada and the NWT are rich in these natural resources (both renewable and non-renewable) and we must manage them carefully in order that they are accessible to future generations. This module will address resource development and the importance of managing our resources properly.

4. When we think of resource development we often just think of the non-renewable resources but the NWT is rich in both renewable and non-renewable resources. Elicit from your students the types of jobs that are provided by both sectors of resource development including;

Renewable Resource Economy

- Forestry
- Trapping and the fur-trade
- Tourism (paddling, photography, hiking to see the land)
- Outfitting (large game hunting)
- Hydro generation (from the rivers)
- Possible wind farm (one is currently being built by BHP)
- Commercial fishing
- Handicrafts (moccasins and other things made from natural resources)

Non-renewable Resource Economy

- Mining for diamonds, gold, uranium and many other minerals, rocks, and gravel
- Oil and Gas
- Service industry to support infrastructure needed (seismic activity, road development)

Main Activity: The Seasonal Round

The Dene and Inuvialuit have maintained a harmonious relationship with the land for thousands of years, making a living by using the resources that the land provides. These were not available everywhere or at all times of the year; to survive, the families moved to the different places where the resources could be gathered.[1] To facilitate a discussion with your students, do the following:

1. Hand out copies of 'The Seasonal Round' found at the end of the unit. Each student needs one copy.
2. Tell your students that you are going to read about life on the land in the 1950's as told by Noel Andre.
3. Read the excerpts from Noel Andre: Life on the Land in the 1950's to share with your students how people used the land throughout the seasons.[2] It can be found at the end of the unit.
4. While you are reading the students should either write out words or draw pictures to represent what Noel said happened in each season.
5. After you have finished reading ask your students what things they wrote or drew in each of the seasons. You may need to read the story more than once. Provide time for them to finish the season activities of the 1950's.

[1] Pg. 54 from same book as below.
[2] Life on the Land in the 1950's: Noel Andre. Taken from Gwichya Gwich'in Googwandak. The History and Stories of the Gwichya Gwich'in As Told by the Elders of Tsiigehtchic, pg. 288, Copyright 2001 Gwich'in Social and Cultural Institute…Michael Heine, Alestine Andre, Ingrid Kritsch, Alma Cardinal and the Elders of Tsiigehchik.

6. Using a different colour on the 'Seasonal Round', ask your students to write or draw what they do in each of the seasons.
7. Discuss what is the same and what is different about how the land was used then and how they use the land now.

Follow-up Activity: Needs and Wants[3]

In this activity students will consider the difference between their needs and wants. Needs are often considered items that are needed for survival such as food, clothing and shelter. Wants are the extra items that we feel would make our lives better. Often our wants are limited by economics and don't take the world's limited resources into consideration.

1. Give students the Student Handout: **Needs vs. Wants.**

2. Have the students complete the lists of needs and wants and address the questions.

3. Some students may feel threatened that what they feel they need may be better classified as a want. Reassure them that it is okay to have wants, however before indulging in our wants, it may be important to consider the Earth's limited resources.

4. Revisit their needs and wants list in comparison to the T-chart of renewable and non-renewable resources. Which category do the majority of their needs fall under (likely renewable such as water and food)? Which category do the majority of their wants fall under (likely non-renewable)?

5. Discuss how it is important that we take care of the land so that our needs can always be met.

6. Ellicit from students ways we can easily take care of the land, right now. Then ellicit from students ways which will take more effort. Draw a T-Chart on the board with the titles, Easily Right Now on one side of the T and With Effort on the other.

[3] Needs and Wants activity adapted with permission from the JHS Earth Sciences unit produced by the Government of Nunavut and written by Peter Maguire and Mindy Willett.

Needs vs. Wants

Name: _____

When considering the resources we use, it is always good to consider the things we need and compare them to the things that we want.

You might hear someone say something like, "I really need that new video game." Do they really need it? Is it a matter of survival, or is it a luxury?

Directions: Make a list of items that you need and want:

What I *Need*	**What I *Want***

LONG/SHORT. Which list is longer? _____

LIMITS. What usually limits* us from having everything that we want? _____

_____

THE WORLD. What would be the impact* on the world's resources if every 6.5 billion plus people in the world were able to have everything they *needed* plus, everything they *wanted*?

_____

_____

YOU. How would your want list change if you considered the impact on the world's resources of getting what you wanted? Would anything be taken off of your "**What I *Want*"** list?

_____

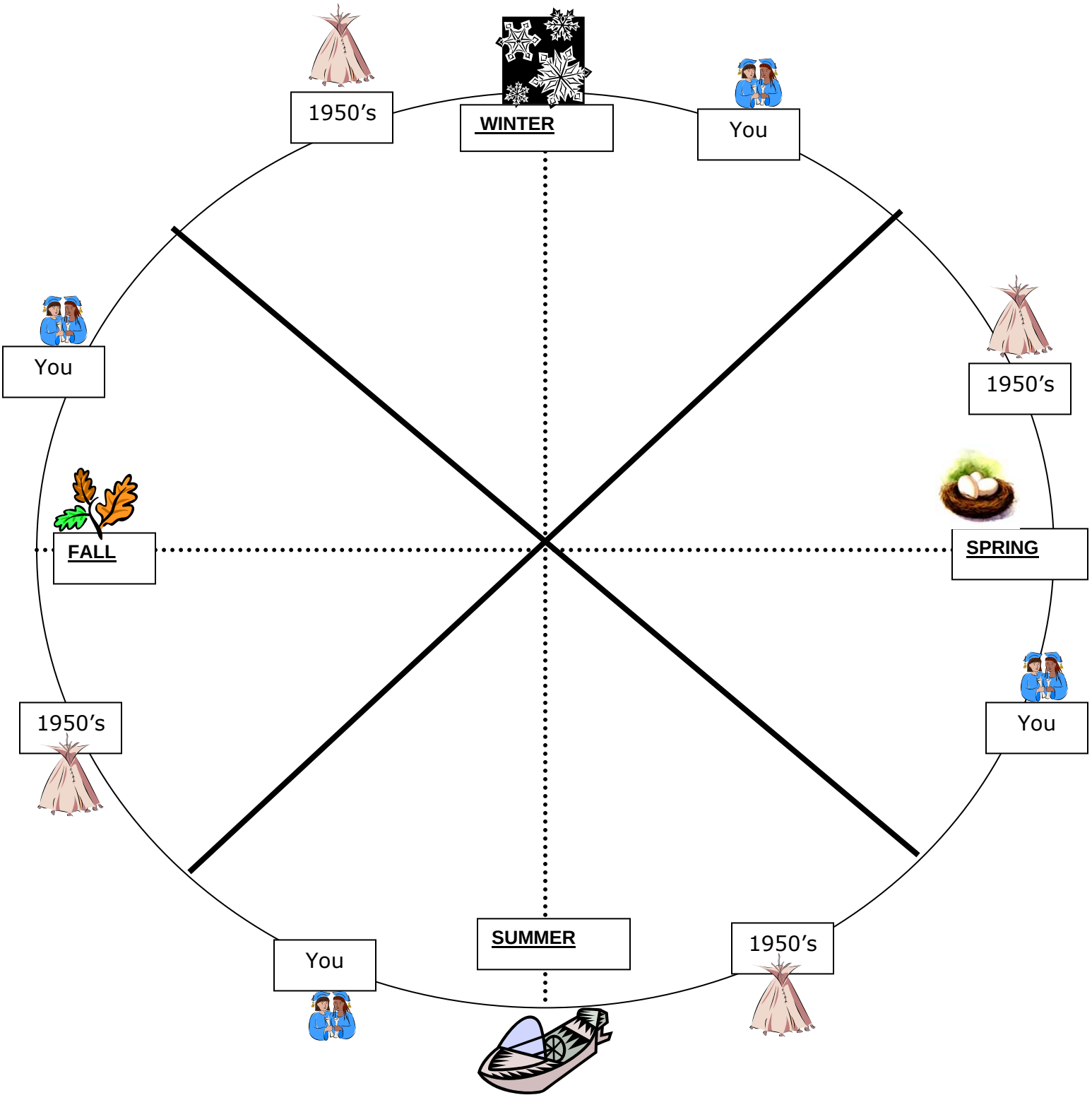
_____

*NOTE: Thesaurus for *limit* (restricts, confines, fixes, prevents) *impact* (effect, influence, consequence)

Name _____

The Seasonal Round

_____



Noel Andre on Seasonal Activities

The following description is taken from:
Life on the Land in the 1950's: Noel Andre. Taken from Gwichya Gwich'in Googwandak. The History and Stories of the Gwichya Gwich'in As Told by the Elders of Tsiigehtchic, pg. 288, Copyright 2001 Gwich'in Social and Cultural Institute Michael Heine, Alestine Andre, Ingrid Kritsch, Alma Cardinal and the Elders of Tsiigehchik.

Well, the story begins right after spring hunt. That's right after June 15. Everybody went to the settlement, wherever their settlement was, everybody did that. All over the communities in the north. At that time, they didn't go back to houses; they just used tents on the beach. Even though they got a house in the settlement, they still set a tent, because they had dogs too, and they had to look after their dogs. So they tied their dogs close by to look after them, and they had to set nests to feed the dogs. After that they went and sold whatever fur they got – spring hunt, beaver or muskrat, bought whatever they needed. And that's about all that was done, as far as I remember, but before me they used to dance, dance and everything. They had hand games too – hand-stick gamble, they called it.

Summer

Then they stayed around until about first of July. Everybody all over the settlements had sports. Lots of fun! After July, well, everybody started thinking of going fishing. This fish was not for sale, that was for their dogs. And they fished all summer long. Any kind of fish they got, they made dryfish from, and put it aside. When they piled it up, they made bales of dryfish. Just imagine, you get hundred thirty bales of herring. That's about three thousand fish there. All that, they saved for their dogs for the winter.

Fall – getting ready for winter

And then in the fall, they started thinking of trapping, so they had to get ready for that too. By September, they all started to go back to where they were going to trap. Some people might be way down in the Delta, or at Big Rock. Big Rock is the best place down in the Delta.

By September they were thinking of winter. Where they were going to trap, well they took off to there. Some of them went up the Red; some of them went up Mackenzie. Once they got to where they were going to trap, well, they started getting ready. No such thing as a ski-do. They took out their harness and they checked it, repaired it and their toboggan. They checked all the ropes on the toboggan.

Trapping in the Winter

And by the first of November, they took off for their traplines. And there are many different ways of trapping. Some of them made one long line. They used dogs, and they brought tents and stoves, extra clothes, axe, gun, snowshoes. They'd have a little bag with their sewing. Even if your snowshoes broke on the trapline, they had a special stuff for that. And if your axe handle broke, well, you just went out and cut a birch, and made your own axe handle.

And they set traps; they set traps for marten, mink, fox, and lynx. Some, of them, the ones that went up the Red, used to go into the Yukon. They trapped all day, everyday until they started thinking of Christmas. By that time they had enough fur to go to the settlement. Didn't take them long, about two three days, and they were back from checking all their traps. And they dried their fur.

Moose Hunting in Winter

Anytime in winter, they hunt moose. They'd take off in the morning. Just pick up your lunch, bannock, maybe drymeat, maybe dryfish and your rifle and snowshoes. Sometimes you would be gone 7 or 8 nights.

When they killed a moose out there, they didn't just kill it and leave it there. They skinned it, and butchered it, buried it in the snow. They covered it with skin and then covered the skin with snow, so that the next day somebody could go there and pick it up with dog team, and bring it back home.

Christmas

And by the twentieth of December, you headed for town. And some of them, in those days you saw lots of people – everyone of them dressed up: fancy mitts, wool string, fancy stroud shoes, wolverine skin around the stroud shoes, and brand new parky. Even some of their dogs were dressed up.

Ratting and Trapping

Right after New Year, they started taking off again, going home, no matter how cold it was. They just went back to their trapline camp, back to wherever they lived and got their own house. Now they had to think of beaver and muskrats, but that's not as hard as trapping in the winter. They had to travel through the bush and find a place they knew was good for rats. They moved there, kids and all.

Spring

They stopped where they thought it was a good place to pass spring. And that's what they did. They brought all the spring supply. You had to have a canoe, a little canoe, a .22, and enough shells. After spring hunt was over, some of them stayed on the river. They got fish too, not whitefish but sucker.

Hunting Ducks in the Summer

Then in the summer, some of them would go out in the bush just to hunt ducks. They packed a canoe too. They went from one lake to the next, to the next, I used to do that lots of times, get a big sack of ducks. And you had to pack your canoe, and your guns, your shotgun and your.22. Whatever ducks you killed, you had to pack all that.

So that is how they used to live in the bush long ago, up until skidoo and T.V. came out. Thank you very much if you're listening. Thank you very much.

Unit 2: History of Resource Use in the NWT

Knowledge and Values Learning Outcomes

Students will become familiar with the history of resource use in the NWT and be able to place themselves in this history. When discussing resource use keep in mind that this includes both the renewable and non-renewable resources. However, since other kits included a look at other historic uses of the land such as the fur trade, this kit will focus more on non-renewable resource use.

If you complete Unit 2, you will have explored the following outcomes:

Skills and Processes

Social Participation

4-S-001 assume a variety of roles and responsibilities in groups

4-S-004 collaborate with others to devise strategies for dealing with problems and issues

Communication

4-S-010 present information and ideas using oral, visual, material, print or electronic media appropriate to specific audience

4-S-011 use a variety of communication methods to interact with others (presentations, email, information exchange with another class, power point presentations, letters, posters, etc)

Managing Ideas and Information

4-S-024 create timelines or other visual organizers to sequence and represent historical figures, relationships or events – explain historical context of key events of a given time period

Theme 2 - Stories of our Origins

Power and Authority

4-V-P-007 demonstrate willingness to take on leadership roles and responsibilities

Economics and Resources

4-V-E-008 Demonstrate respect for the land

4-K-E-019 Demonstrate understanding of
- how the land was used
- what was made
- where resources were found

Theme 3- Continuity and Change in the NWT

Time, Continuity and Change

4-K-T-024 demonstrate awareness of key people and events that shaped their province and territory

4-K-T-026 demonstrate awareness that accounts of the past may vary according to different perspectives

4-K-T-027 give examples of how technology has changed ways of life in the NWT

4-K-T-029 demonstrate awareness of the stories of people who participated in the fur trade (Thanadalthur, Knight, Steinbruck, trading chiefs, Nuligak)

4-K-T-030 demonstrate awareness of the stories of people who participated in whaling (Nuligak, traditional whaling, commercial industry of Herschell Island…)

4-K-T-031 demonstrate awareness of the changing modes of transportation (ie May, …skidoo, float plane, motor boat, skin boats, spruce canoe, birch canoe)

4-K-T-034 demonstrate awareness of the stories of people who participated in the development of mining in the NWT (Fipke, LaBine, Johnny Baker).

Materials

- Prophecy stories on CD
- Mine Summaries produced by Mining Heritage Society
- George Hunter photographs (optional)
- Timeline tickets

Vocabulary

- Prophecy
- Slavey
- Historic

Opener: Prophecies

1. Play the prophecies located on the resource CD for your students. There are three. They can be listened to in either English and Slavey.

2. According to all three stories, why is there oil in the Sahtu?

3. Have your class think about how resources are used now and compare it to how they are to be used or are used in the stories.

4. Find out if any of their families have stories or prophecies to share.

5. According to the book, Dehcho-Look Mom I've Been Discovered, oil was first discovered by the Francis Nineye. Obtain a copy of this book from your school library and have your students' research who discovered oil and how it was shared with the new comers to the land. Too often the credit is given to the newcomers which has proven frustrating for the Dene as is described in the book mentioned above.[4]

[4] Dene Cultural Institute, Dehcho- Look Mom, I've Been Discovered. Yellowknife, NT.

Connector: Historic Mines of the NWT

Volunteers from the NWT Mining Heritage Society prepared a summary of the mines of the NWT to go along with George Hunter's photographs. There are several ways you could use this information to help students learn about the historic mines in the NWT.

- Assign each student one mine. Have them summarize the materials and present back to class. There are over 40 mines listed in the paper written by the NWT Heritage Society. Not all of the mines will have equal amounts of information.
- Select 5-10 mines that have the most information. For example, the Heritage Society summarized 7 mines with their history and the paper is included in the kit. Set up stations around the classroom in chronological order of the mines discovery. Provide 10 minutes or more for each station and have the students go around the room taking notes from each station. Ensure you have given them guidelines as to what type of information they should be reading the summaries for. (Dates of operation, location, name etc.) Select 5-10 things that you want them to know and make up a table or sheet and they can use this to learn about each of the mines.
- Summarize and review the information as a class.

Main Activity: Timeline Tickets

This activity will give students a frame of reference and/or the context within which to process information as it is acquired throughout this unit. In addition, it can provide background information on NWT Resource Development –Past-Present-Future.

Blackline Masters are provided. One set of Timeline Tickets has already been filled in with a few 'KEY EVENTS' to which other details can be added. Blank versions are provided for student research. Since these tickets will be copied from the Blackline Masters, they stay with the class!

Complete the following with your class.

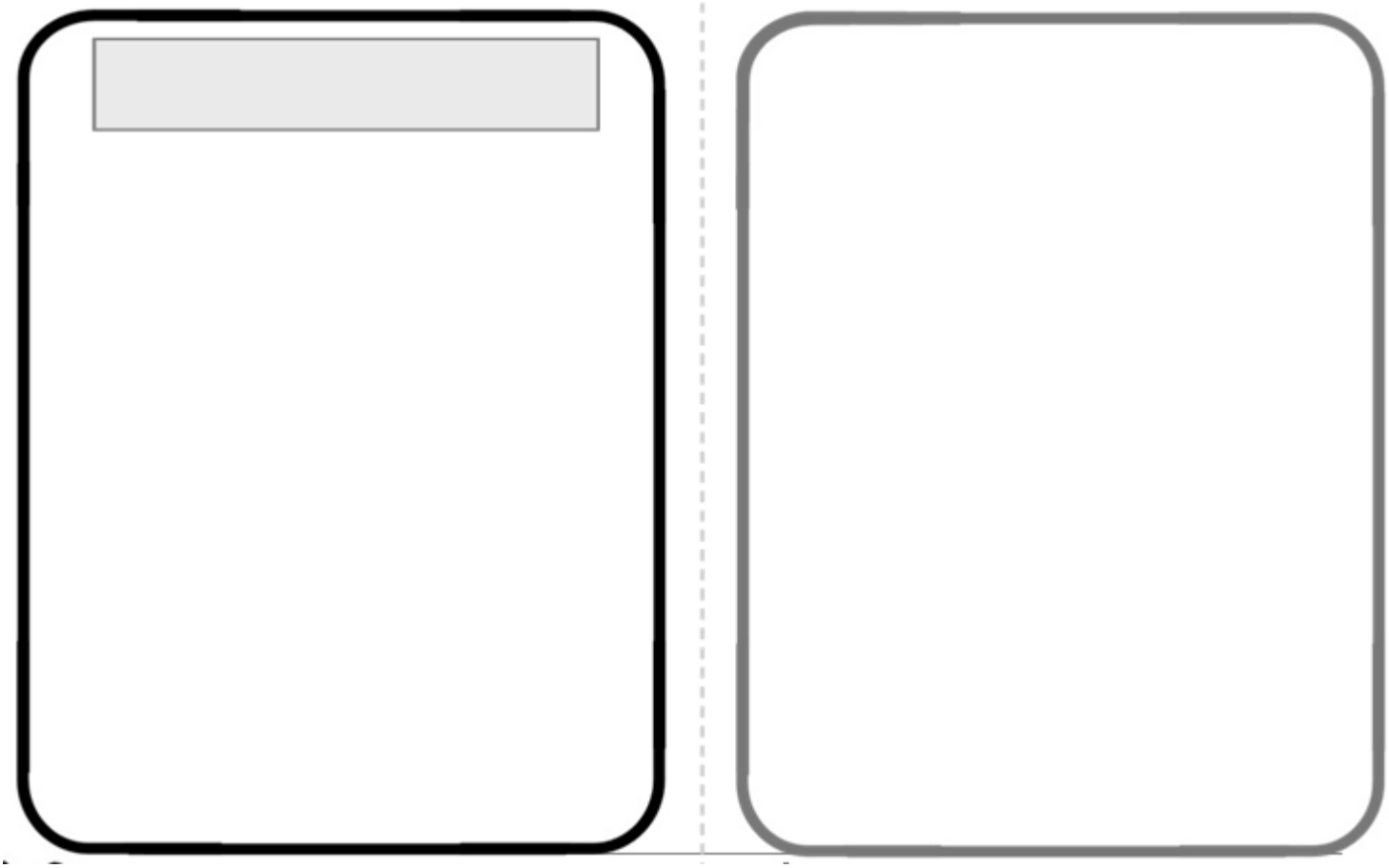
1. Set up a classroom 'clothesline/timeline' somewhere within the room or school.
2. Cut out the timeline tickets and laminate them so that they will last longer.
3. Shuffle the cards and distribute them amongst the class at random.
4. Have your students put themselves in chronological order.
5. When the class is all in order have each student read out their card in turn.
6. Discuss each card to ensure they understand its meaning.
7. When they have finished reading it out and you have ensured the class understands ask the students to paperclip their date to the timeline clothesline.
8. Hand out another copy of the time line for the students to keep in their notes.

Follow-up Activity: Additional Uses of the Timeline Activity:

The Timeline Tickets can be used over and over throughout the year to review and strengthen understanding in a variety of ways.

- Sort and classify
- Arrange in date order
- Use in card game activities to reinforce date-event connections
- Summarize events of an era (ex: the 1800's)
- Act as a story starter or the basis of a play
- Provide numerical information to use in the creation of Math story problems

---



Unit 3: Mapping the NWT, Canada and the World

Knowledge and Values Learning Outcomes

Students will familiarize themselves with the components of a map including: cardinal and intermediate directions, colour contour maps, simple grids, title, legend, scale, compass rose and grids. They will be able to identify on a map the territories, provinces, and capital cities of Canada and the regions within the NWT including major lakes, rivers and communities. They will be able to identify the equator, prime meridian and the hemispheres. Students will be able to organize and record information using the maps.

If you complete Unit 3, you will have explored the following outcomes:

Skills and Processes

Communication

4-S-013	use illustrations, charts and graphs to support written work

Managing Ideas and Information

4-S-023	organize and record information and information sources using a variety of formats, e.g. *charts, maps, concept maps, bibliographies*
4-S-025	use cardinal and intermediate directions, colour contour maps and simple grids to locate and describe places, resources and regions on maps and globes
4-S-026	construct and interpret maps that include a title, a legend, a scale, a compass rose and grids
4-S-028	identify on a variety of maps the location of sources of non-renewable resources (fossil fuels, minerals etc.)

Theme 1 - Canada and the NWT- The Land and People

The Land: People and Places

4-K-L-004	identify on a map the territories, provinces, and capital cities of Canada
4-K-L-005	identify on a map or globe the equator, the prime meridian, and the hemispheres
4-K-L-006	describe the location of our territory in relation to Canada and the world using cardinal directions, hemispheres.
4-K-L-008	identify on a map the major lakes, rivers and communities of the NWT
4-K-L-009	locate traditional areas of Aboriginal peoples and language groups on a map of the NWT

Background

Each grade 4 classroom has been provided with 2 large NWT wall maps prior to receiving this Unit. These maps will provide a basis for the activities listed in the NWT Resource Development Unit. On the CD are downloadable maps which will be needed for this unit.

Establishing a 'map place' in the classroom for use throughout the year will further enhance student learning in this area. Consider including items such as a large wall map, globes, road maps, a variety of atlases, tourist maps, contour maps, satellite maps, GPS maps, old maps, upside down maps (called the Peterson projection), language area maps, maps showing traditional areas used by various aboriginal groups, land claims areas and any other map.

This particular Unit provides map outlines of the NWT, Canada and the World.

It is recommended that mapping be introduced early in the unit so students acquire an understanding of location and have a point of reference for both the Timeline activities as well as the information they will gather throughout the unit.

Unit mapping activities can be used in a variety of ways. They can easily be used in conjunction with the Timeline activities to support and enhance student learning.

Materials

- Maps of the NWT
- NWT Resource Development map
- Resource Development Scavenger Hunt (Student hand out)

Vocabulary

- Equator, prime meridian and the hemispheres
- Continent
- North America
- Latitude, longitude
- Cardinal direction
- Compass rose
- Arctic Circle
- Legend
- Scale

Opener: Mapping vocabulary

The Context

1. Print the following vocabulary onto cards and hand out one card to as many students as there are cards; equator, prime meridian, northern hemisphere, southern hemisphere, continent, North America, Africa, longitude, latitude, compass rose, cardinal direction, Arctic Circle, legend, scale.

2. Hand out one card to each student randomly (but if you have weaker students you can ensure they get simpler terms so they can feel successful).

3. Provide time for them to look their words up in the dictionary so that they can explain their new words using the globe or map provided.

4. Invite each student to come up one at a time to explain the words.

5. Add all the words to a word bank.

Connector: Where in the world are we?

Start with a globe and a map of the world. Ask one student at a time to come up to the map and point out North America. Ask the next student to point out Canada, and the next the NWT. Within the NWT ask if anyone can point to the location of your community. Next, find out how much they know about each of following:

- Dehcho (Mackenzie) River
- Inuvialuit, Gwich'in, Sahtu, Tlicho, Dehcho, Akaitcho land claim areas
- Great Bear and Great Slave Lake
- Beaufort Sea
- Communities (see how many they can name and point to)
- Tree line
- Mines

Main Activity: Map Scavenger Hunt

The map, NWT Resource Development , is provided. This map was produced in 2007 and has many layers. Use the copies of the map provided to do the scavenger hunt with your class. If you want to add other layers there is a copy of the map on the CD and you can make your own map by selecting the layers you want.

1. Hand out a copy of the map to each group of students.
2. Hand out a copy of the 'Scavenger hunt' to each student.
3. Ask students in pairs or groups to work through the questions using the map.
4. The more challenging questions can be found at the end of the scavenger hunt and depending on your class you may choose to have everyone do the questions or just a few students.

Follow-up Activity: Other Map Ideas

Using a collection of maps allow the students to creatively express their knew vocabulary. Make maps of certain parts of the NWT with play dough or a collage or paper mache.

Resource Development Map Scavenger Hunt

Using the NWT Resource Development map, answer each of the following questions.

1. A **compass rose** is a figure displaying the orientation of the cardinal directions, north, south, east and west on a map or nautical chart. Find the compass rose on the map . Draw it on your answer page.

2. **Longitude** describes the location of a place on Earth east or west of a north-south line called the Prime Meridian. Longitude lines go vertically on the map. Longitude is given as an angular measurement ranging from 0° at the Prime Meridian to +180° eastward and −180° westward.

    a) Find the longitude markings at the top of the map. What are the increments of measurement (how much does each longitude line increase or decrease by)?

    b) Find your community on the map and estimate what longitude it is at.

    c) Find one community or lake to the west of your community and estimate its longitude. What happened to the number?

3. **Latitude** gives the location of a place on Earth, north or south of the equator. Lines of latitude are the horizontal lines shown running east-to-west on maps. Technically, latitude is an angular measurement in degrees (marked with °) ranging from 0° at the Equator (low latitude) to 90° at the poles (90° N for the North Pole or 90° S for the South Pole; high latitude).
    a) Find the latitude markings on the side of the map. What are the increments of measurement (how much does each latitude line increase or decreasy by)?

    b) Find your community on the map and estimate what latitude it is at.

    c) Find one community to the south of yours (or lake if there are no communities south of you) and estimate its latitude. What happened to the number?

4. The **Arctic Circle** is the invisible circle of latitude on the earth's surface at 66°33' north, marking the southern limit of the area where the sun does not rise on the winter solstice or set on the summer solstice. Which community is closest to the Arctic Circle?

5. Most maps will tell you who made the map. Look at the bottom left hand corner to determine who produced this map.

6. One of the very important elements of a map is the **legend**. A map would be useless to you if you wouldn't know the meaning of the various colours and symbols that the mapmaker chose to use. A legend usually contains symbols. Look at the legend and find out what each of the symbols mean;

    a) Dotted Red Line (there are two possibilities)

    b) Red star

    c) Ship

    d) Picture of a cabin

7. National Parks are shaded green. Which National Park is nearest to your community?

8. Find the scale of the map. Using your fingers (or a string) measure how far 100km would be on the map. Now, move your finger and estimate the distances between each of the following ('as the crow flies'…which means the shortest distance);

    a) Wrigley to Fort Good Hope

    b) Sachs Harbour to Yellowknife

    c) Lutselke to Fort Simpson

9. Using the map, which communities have active forest industries?

10. Name two communities near drilling sites for oil and gas.

11. Which communities are nearest the diamond mines?

12. What minerals have been mined in the past and or are being mined now?

13. Which communities are near mountains? How did you use the map to determine which ones?

14. The winter road that travels to the diamond mines goes over many bodies of water. Find one long lake that the road goes over.

15. Which communities have between 1000 and 5000 people? How do you know this?

16. How many communities are there in the NWT? Water has always been a major transportation route for NWT residents. Determine which communities are on each of the following bodies of water.

    a) Which communities are on Great Slave Lake?

    b) Which communities are on the Mackenzie River (Dehcho)?

    c) Which communities are on the ocean?

    d) Find two communities not listed above and determine which bodies of water they are nearest.

17. Which community is the farthest north?

18. Which community is the farthest south?

19. What resources listed on the map are non-renewable resources?

20. What resources listed on the map are renewable resources?

Challenge Questions:

21. Trapping is a renewable resource that is important to the NWT. Think of a symbol that could be used for trapping and draw it below. Why would it be difficult to put this symbol on the map?

22. The scale is the relationship between distance on the map and distance on the ground. A map scale usually is given as a fraction or a ratio—1/10,000 or 1:10,000. What is the scale of this map?

23. Name one tourist camp or outfitter. There are many, many more in the north. For a bonus, find out one tourist camp or outfitter that is not on the map.

24. Can you think of any other resources that are not indicated on this map?

Unit 4: Exploration and Mining Steps

Knowledge and Values Learning Outcomes

The students will become familiar with the steps involved in mining and exploration and be asked to think about the positive and negative aspects of mining and the different perspectives of the exploration and mining process.

If you complete Unit 4, you will have explored the following outcomes:

Skills and Processes

Social Participation

4-S-002 participate in making and carrying out group decisions

Creative and Critical Thinking

4-S-015 formulate questions for inquiry

4-S-017 observe and describe material and visual evidence for research*, e.g. artefacts*

4-S-018 consider advantages and disadvantages of solutions to problems, e.g. environmental impact of resource development

4-S-019 draw conclusions based on information from a variety of sources

4-S-020 evaluate personal assumptions based on new information and ideas

Global connections

4-K-G-035 identify ways in which the peoples of our territory were and are connected to other peoples and other parts of the world, *e.g. circumpolar peoples and countries, languages, travel, jobs.*

Theme 4 - Living in the NWT

The Land: Places and People

4-K-L- 048 identify NWT renewable and non-renewable resources

4-K-L-049 demonstrate an understanding of both the positive and negative impacts of resource development on the NWT in regards to economic, social, environmental, education, technology and global connections

Economics and Resources

4-K-E-052 explore different ways that people earn their living in the NWT (ie, hunting, trapping, fishing, mining, government, transportation, services).

Materials

- 'You found my mineral' (student hand out)
- Magnets
- Assorted boxes
- Graph/grid paper
- Compass
- Different colours of plasticine (4 needed)
- Straws
- Trays

Vocabulary

- Exploration
- Valued ore body
- Indicator rock
- Development
- Construction
- Mining
- Geologists
- Land Claim group
- Impact Benefit Agreement (IBA)

Opener: You found my Mineral

This activity is based on the game, 'Battleship' where players say, 'You Sunk my Battleship!' Rather than attempting to find a battleship the students use a grid to attempt to find a valued ore body.

A **valued ore body** is simply the rock or mineral that you are looking for. It could be diamonds, gold or uranium.

Indicator rock is the rock that is often found near the valued ore. It helps to tell the geologists that they are close to finding what they are looking for. Kimberlite pipes are indicators of diamonds.

Complete the following;

1. Photocopy and hand out copies of the grid paper to each student.
2. Have each student label the vertical (X) and horizontal (Y) coordinates or axis. Tell them that this simulates an area of land that they think a valued ore body is located.
3. Have each student colour in a predetermined number of squares (the fewer the squares, the harder the game) to represent their ore body. For example, somewhere in the grid they could colour three squares in yellow.
4. After they have selected the valued ore location they need to colour the squares all around it in red. The red represents the indicator minerals.
5. In partners, the students can play...

- Partner #1 randomly guesses, X12, Y4.
- Partner #2 looks up X12 and Y4 on their grid. If they have a miss, they say, 'miss'. If they hit a red or yellow they say, 'hit' and the colour.
- Partner #1 keeps track of incorrect and correct answers on a separate grid with coloured pencils (easier if the same colours as the valued ore and indicator rock).
- Partner #2 now gets to guess where their partner's minerals are located.
- Play continues until one of the students successfully finds all the valued ore.

6. Have a class discussion when everyone has had a chance to play the game. Ask what strategies did they use to find the valued ore?
7. Go over the definitions of valued ore and indicator.
8. How challenging do they think it will be to explore the large land mass of the NWT to discover the riches in the land? How much do they know about how resources are discovered?

Connector: Steps of Mining

In this connector the students will explore the stages within the mining process and learn the appropriate terms for the various processes. Tell the class that they are going to open a mine. Have them brainstorm what they will have to do in order to open and run a mine. The list will contain items similar to:

Hire workers	Dig hole	Ship minerals
Sell minerals mined	Ship minerals	Find mineral deposit
Build tunnels	Refine mineral	Close mine when done
Make sure land is clean	Not ruin archaeological sites	

Depending on how much exposure they have had to the mining industry they may also mention environmental monitoring or checking to make sure the water is healthy.

Another complicated area is working with all the different levels of governments including Federal, Territorial, municipal and Aboriginal to ensure the right permits and permissions have been given.

To mine in the NWT, companies must also have agreements with the land claim organizations that will be impacted. These agreements are called Impact Benefit Agreements or IBA's.

Have the students determine an appropriate order for the items they have stated. You can just put numbers besides each, starting at one for the first thing to be done. On a very basic level students should be able to identify that minerals of interest will need to be found, workers will need to be hired, the mine will need built, the minerals will need to be removed from the ground, processed, shipped and sold, and the mine will need to be closed and the land cleaned up.

Now more standard terminology can be introduced to their mining process. Present the terms: Exploration, Development and Construction, Mining (Extraction and Processing), Marketing, Reclamation and Closure. Explain the terms as following:

- Permitting (permission to explore in an area and then permission at each stage to develop, use water, use gravel to build roads etc.)
- Exploration: finding rocks worth mining
- Development and Construction: building the mine and infrastructure
- Mining (Extraction and Processing): taking the rock out of the ground and separating the wanted minerals from the unwanted.
- Marketing: selling the minerals
- Reclamation and Closure: cleaning up the mine and closing it down.

Have the class sort their list into these categories. This is the mining process in general.

Main Activity: Exploration

Mineral Exploration is the first phase of the mining cycle (after permission to go on the land has been obtained from the land owner). It is the search for mineral deposits. Every new mine has its beginnings as an exploration project; however most exploration projects will not advance to become mines.

Using information from DIAVIK, help your students to understand the complexities of exploration for diamonds.

Finding diamond deposits is difficult and costly. Rather than look for the elusive and rare diamonds, ***geologists*** *(people who study rocks and minerals) seek other clues. Working from tent camps, geologists conduct several types of surveys. Using geochemical surveys, soil samples are taken and panned for indicator minerals like garnets found in more abundance in kimberlite pipes. A trail of indicator minerals can lead to potential pipes. In addition, geophysical surveys are used to differentiate hidden kimberlite pipes from surrounding host rock.*

Computer-generated geophysical data is mapped.

If a potential kimberlite target is identified, portable diamond drills are used to remove core samples to determine if the target is in fact kimberlite. Further drilling helps define pipe size and shape, and provides additional rock for diamond testing. Not all kimberlite pipes have diamonds.

When diamonds are found in sufficient quantities to suggest an ore body, a small mining operation is conducted to remove a larger, several thousand tonne, bulk sample. This sample is processed to remove the diamonds, which are then evaluated for quantity, quality, and size.[5]

This following activity will explore one technique of exploration they have learned - geophysical surveys - and give your students a taste of what it would be like to map what is underground.

Have your students apply their mapping skills and new language by using the vocabulary when describing where their minerals are located. They should put a compass rose on their grid.

Geophysical Surveying: This activity will model the concept behind geophysical surveying and especially magnetic surveying.

1. Before class tape two or three magnets onto the bottom side of the top of boxes. The strength of the magnets depends on the type of box you use. Test to ensure the magnets are strong enough before using with your class.

2. Tape the boxes closed.

3. Number the boxes in order that students can refer to them later. Have the students work in pairs.

4. The students will place a piece of grid paper on the top of the box and move the compass across the top of the box noting on the grid paper any abnormalities (strange motion of compass needle).

5. It is the students' job to predict where there might be magnetic fluctuations within the box. For each box, have students predict the number and location of the abnormalities. Have the students rotate through the boxes you have created. For an example of a map generated by geophysical survey see: http://www.diavik.ca/exploration.htm.[6]

[5] http://www.diavik.ca/exploration.htm
[6] Adapted with permission from the Government of Nunavut Earth Science module, written by Peter Maguire.

Follow-up Activity: Diamond Drilling

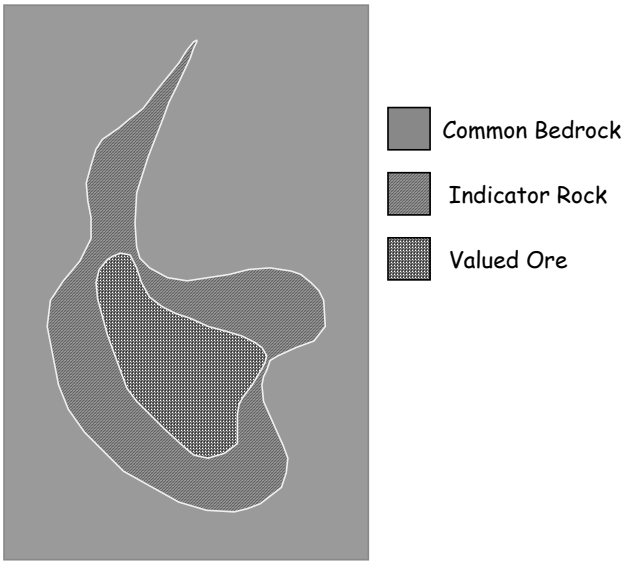
This activity models the concepts of diamond core drilling. Before class construct several trays with two plasticine layers similar to the diagram. Use four different colours of plasticine (colours provided here to match with the example photographs, use any colour you have). Each colour represents one of the following:

- valued ore (the rock that people are looking for) (yellow)
- indicator rock (rock that is often found in areas of the valued ore) (red),
- common bedrock of the area (blue), and
- overburden (loose rocks, soil, till and other debris) (green).

1. Form a pattern of valued ore (yellow); surrounded by some indicator rock (red) and the rest of the tray can be filled with the common rock (blue). You may choose to have more than one deposit of ore (yellow) depending on the size of the tray.

2. Roll out the green to represent the overburden (overlaying sediment, grasses etc.) and cover the entire top of the other colours.

This layer prevents students from seeing the rock layer. Give the students the following directions:



- You are a geologist and you work for an exploration company looking for the valued (yellow) ore. You know that red is an indicator and that the valued ore is close by. From your exploration work up to this point, you believe that the valued ore is within the region of your tray. Part of the tray is just common bedrock and is a blue colour.
- Tell the students that the straws are your diamond drills. Each straw should only be used once. Tell them that drill programs are very expensive and it is important not to waste drilling resources.

- Demonstrate how to use the drills (aka straws) by pressing it through the plasticine layers and pulling the straw out. (Cutting the straws in half will reduce how many are used.) By viewing the end of the straw you can see the colour of the plasticine, the type of rock, and where the drilling was done. These are called core samples. The straw can be placed upside down in the hole to remind students what colours were discovered in each drill shaft (hole).
- To enhance the reality of the activity you could limit the amount of straws given for financial reasons. Or, you could give each group a certain amount of money and each straw costs $50. The group with the best distribution diagram and with the most money left are the best miners/healthiest company. You could also add environmental costs.

Perhaps they are drilling on important wildlife habitat and are fined. Add different components depending on the level of your students.

- Inform the students that it is their group's job to map the tray's rock type. Provide them with grid paper that they can use to represent the tray and tell them to develop a method for recording their drilling results.
- If they run out of drilling resources (straws), they will have to fundraise by convincing investors to spend more money on their project. This can be done by talking to the investors (the teacher) and convincing them that they are making progress in mapping the tray and finding the valuable ore. If the investors are convinced that they are making progress they may provide the exploration company with more resources (straws).

3. Have the students start drilling. Set a time limit for this activity. When you feel each group has been able to drill enough to map their tray, have them turn the plasticine out of the tray to see how closely their map shows the distribution of the ore.

1. Remind them that the pattern of plasticine will be a mirror image of their map since they are viewing it from the bottom.
2. To view what is in the straw the students will need to cut open the straw or squeeze the plasticine out.

Underlying rock deposit.

Roll out overlying layer.

Overlying layer (overburden).

Pressing layers together.

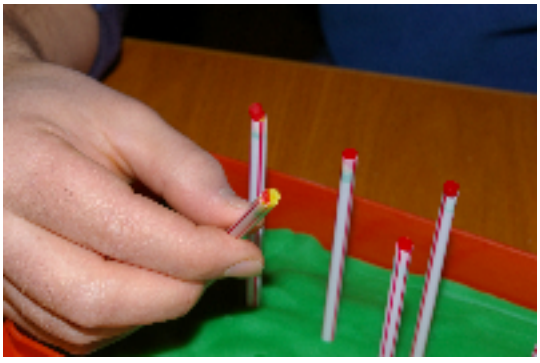
Inserting a straw.

Removing straw.

Examining drill sample.

Second drill sample.

Displaying drill samples.



Hit of valued ore deposit.

Display of several drill samples.

You Found My Mineral?

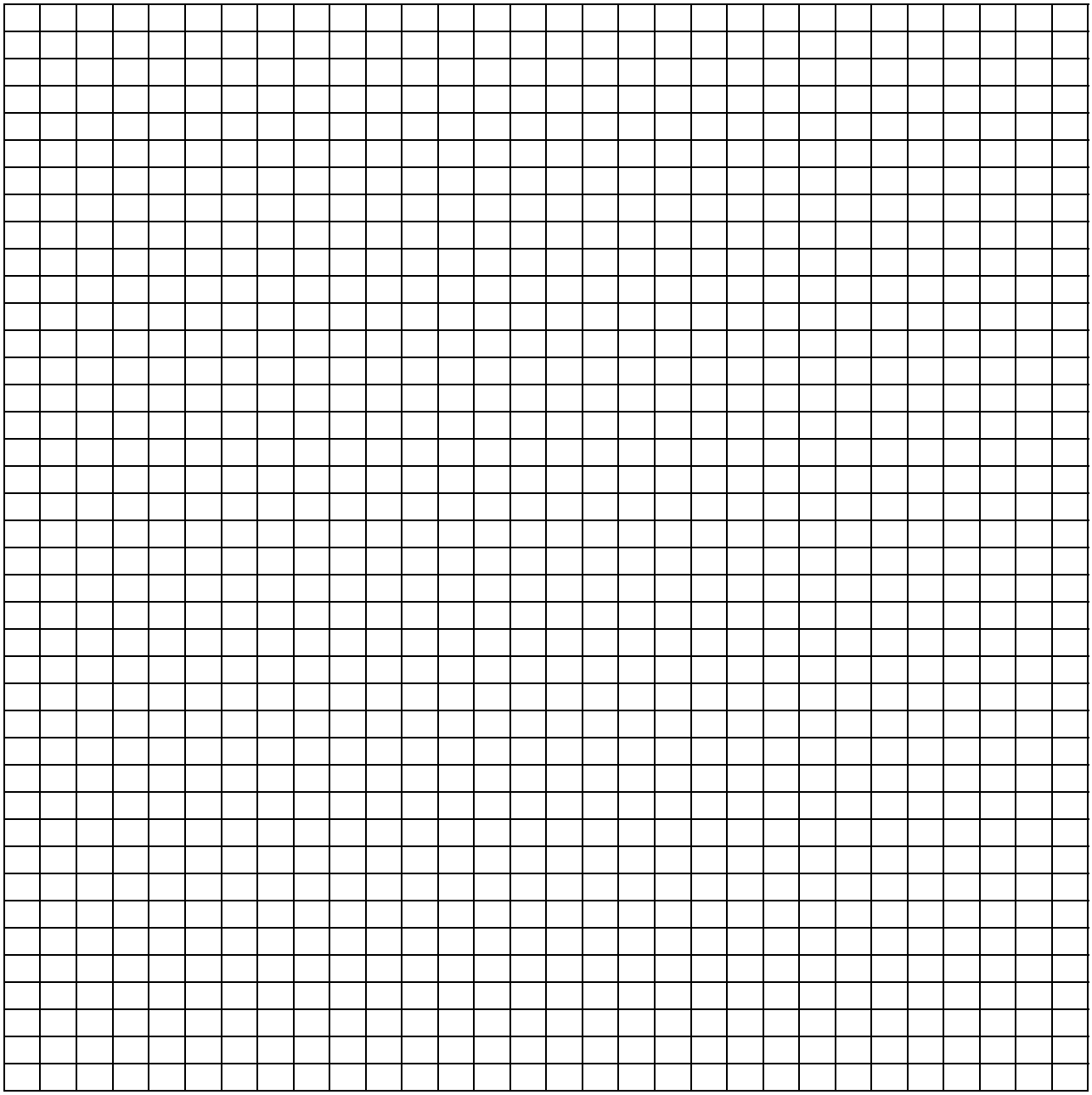
Name: _____

(10 x 10)--(for a quicker game)

You Found My Mineral?

Name: _____

(30 x 40) --(for a longer game)



Unit 5: Minerals, what are they?

Knowledge and Values Learning Outcomes

Students will understand how to identify rocks and minerals and the different tests needed. They will recognize the knowledge of the Elders and will be able to think about career opportunities in the mining industry.

Materials

- Rock samples (not provided)
- Addison Wesley, Grade 4, Science and Technology resource (not provided)
- Mineral or Not? student hand out
- Career Cards

Vocabulary

- Traditional knowledge
- Flint
- Mohs Scale for hardness
- Limestone test
- Magnetism test
- Naturally occurring
- Inorganic and organic
- Vocabulary identified by teacher from card games (select what you want them to know)

Opener: Traditional Uses of Minerals

Invite an Elder to share their traditional knowledge about starting a fire using the mineral flint. Have students practice starting a fire using the flint techniques taught by the Elder. Ask the Elder to discuss where and how the flint was found. Discuss the importance of flint for survival in the past. Have the students write a 'how to' guide for steps to using the flint to start a fire. Also have students record other stories related to flint. Compare and contrast the use of a flint with other traditional methods of starting a fire.

Ensure that students understand that flint is a mineral. Flint is a type of quartz, also referred to as chert. In addition, flint can be shaped into sharp edges and has been used to make spearheads and other tools.

Ask the Elder what their perspective is of the mining industry. Are there places where they approve of mining? Are there places where they would not? Why?

Connector: Mineral Identification

Identifying rocks and minerals is well described in Addison Wesley, Grade 4, Science and Technology, Rocks and Minerals (recommended resource). Chapter 5, Testing Rocks and Minerals, takes the students through the Mohs Scale for hardness as well as the limestone test and magnetism test. Students should use this resource to identify rocks and minerals and acquire the language necessary.

Main Activity: Mineral or Not

After your class has studied the difference between rocks and minerals and their uses complete the following chart to apply some of their new knowledge.

Solution to Chart:
Put an X anyplace that satisfies the definition and a O anyplace that does not satisfy the definition.

Item	Solid	Naturally Occurring	Inorganic	Definite Chemical Composition	Mineral (Yes/ No)	Justification: Why you made the decision you did?
Glass	X	O	X	X	No	Not natural.
Diamond	X	X	X	X	Yes	Satisfies all conditions.
Crude Oil	O	X	X	X	No	Liquid.
Table Salt	X	X	X	X	Yes	Satisfies all conditions.
Water	O	X	X	X	No	A liquid.
Bone	X	X	O	X	No	Organic.
Steel	X	O	X	X	No	Not natural.
Gold	X	X	X	X	Yes	Satisfies all conditions.
Ice	X	X	X	X	????	See below.
Quartz	X	X	X	X	Yes	Satisfies all conditions.
Wood	X	X	O	X	No	Organic.

Encourage discussion about the classifications of an object being a mineral or not. The notes below may help with the discussion. As always, there are grey areas. Not everything is easily defined. If the chemical composition part of this is too challenging for the grade level, this activity can be done without that section.

- Glass: Glass is made from the mineral quartz but is human-made and does not occur naturally.
- Diamonds: Diamonds are made of the chemical element carbon (C). Diamonds used in jewellery are cut (actually polished) to give them more sparkle. Diamonds are found naturally, although there are synthetic diamonds and diamond-like materials that are human-made.
- Crude Oil: Remind students that crude oil is oil directly pumped from the ground. It is refined to create products such as gasoline, oils, lubricants and plastics. Students may understand that the source of this oil is organic material trapped under the surface of the Earth many years ago. It is debatable if crude oil is organic or inorganic.
- Table Salt: Table salt is the chemical compound sodium chloride (NaCl). Many students may not realize that salt is mined.
- Water: Since water is a liquid, it is not considered a mineral. It is naturally occurring, with a fixed chemical composition (H_2O).
- Bone: Some students may argue that bones are minerals since they are made of calcium. This is true; however, they are organic because they are or were part of a living organism.
- Steel: Steel is made from minerals but steel is not found naturally.

- Gold: Nuggets of gold are found naturally and gold is an element of the periodic table (Au).

- Ice: This is an interesting material to consider. It does have a fixed composition (H_2O) and is certainly naturally occurring. It is solid, but at room temperature, it is not. Other minerals that are solid also melt at higher temperatures. You may want to have students vote as to whether ice should be considered a mineral. (Science is not always clear and definite!)
- Quartz: This is the most common mineral on the Earth's surface. Most students will be familiar with pieces of white quartz (quartz also comes in many other colours). Quartz is the chemical composition SiO_2.

- Wood: Since wood is organic, it is not a mineral.

Career Cards

The Mine training society of the Northwest Territories has put together a set of playing cards with different career options within the mining industry. Use the cards in many different ways.

- Play regular games such as go fish to learn the careers listed
- Have students select a card and then report on the career listed
- Have students go through all the cards and select the top three that they would be interested in doing.

Mineral or Not?

Date: _____ Name: _____

Definition: A mineral is a solid, naturally occurring, inorganic substance (not living) with a definite and predictable chemical composition.

What does this mean? Let's break it into parts:

- Solid: Not liquid or gas at room temperature.
- Naturally Occurring: Found in nature, not man made.
- Inorganic: Not living and never was living (organic).
- Definite and predictable chemical composition: There is a fixed chemical recipe for the mineral. (Made of a particular chemical element or compound of elements.)

Use the above definition to decide whether the items below are minerals. (Watch out! Some of the items are made from minerals or are made up of minerals but are not minerals themselves.)

Put a ✓ anyplace that satisfies the definition and a ✗ anyplace that does not satisfy the definition.

Item	Solid	Naturally Occurring	Inorganic	Definite Chemical Composition	Mineral (Yes/ No)	Justification: Why you made the decision you did.
Glass						
Diamond						
Crude Oil						
Table Salt						
Water						
Bone						
Steel						
Gold						
Ice						
Quartz						
Wood						

Unit 6: Protecting our Special Places

Knowledge and Values Learning Outcomes

Students will understand that while non-renewable resource extraction industries are critical to the economic health of the NWT, it is as critical to maintain the health of our land, water and air. This unit will introduce different tools used to protect the special places in the NWT such as Land Use Planning and the NWT Protected Areas Strategy.

If you complete Unit 6, you will have explored the following outcomes:

Skills and Processes

Social Participation

4-S-006 make decisions that reflect care, concern, and responsibility for the environment

Communication

4-S-007A listen respectfully to stories and points of view of Elders

Creative and Critical Thinking

4-S-018 consider advantages and disadvantages of solutions to problems, e.g. environmental impact of resource development

4-S-022 demonstrate an understanding that ways of living reflect values

Theme 3- Continuity and Change in the NWT

Global connections

4-K-G-035 identify ways in which the peoples of our territory were and are connected to other peoples and other parts of the world, *e.g. circumpolar peoples and countries, languages, travel, jobs.*

Theme 4 - Living in the NWT

Culture and Community

4-V-CC-013 appreciate the cultural diversity within our territory

4-K-CC-043 describe how First Nations, Inuit, Métis and other peoples have helped shape our territory (*Museum Time Line)*

4-K-CC-047 identify diverse cultural communities and describe how they have helped shape our territory

4-K-L-050 demonstrate an understanding of why certain places have been designated as Protected Areas in the NWT (ecological, species, cultural/historical,)

4-K-L-051 demonstrate an understanding of how certain places have been designated as Protected Areas in the NWT (traditional knowledge, land use plans, land claims, national parks, NWTPAS)

Background

The land and water sustain all life. For many residents of the Northwest Territories, the land is an important part of who we are and how we define ourselves. Although the economic resources are vital to the health of the NWT economy, we must protect our special places. Two of the tools to help achieve balance are land use planning and the NWT Protected Areas Strategy.

Land use planning is a tool used to proactively propose how a region should be developed, preserved, harvested or otherwise used, and as a guide for future activities. In this way, a region can identify the land needed for development, tourism, hunting and parks, on its own terms. The land use plans are reviewed and updated on a regular basis, usually every five years.

People who do land use planning must have a good idea of where and how they want the land and the people to be in the coming decades. A Land Use Plan (LUP) becomes a map to help guide people toward their land use goals. A Land Use Plan also has the potential to improve resource management in an area. Once it is approved, an LUP provides direction to regulators and decision makers when people want to develop, protect or otherwise use the land.

The Gwich'in Land Use Plan was the first comprehensive Land Use Plan to be completed in the NWT, so it will be used as a model to help students understand what a Land Use Plan is. Provision for the Gwich'in Land Use Planning Board was made through the Gwich'in Comprehensive Land Claim Agreement in 1992. Soon after the Land Claim was signed, the Planning Board operated as an interim board until it was officially established by the Mackenzie Valley Resource Management Act in 1998. The Planning Board developed and has implemented a land use plan for the Gwich'in Settlement Area. In following the principles outlined in the Land Claim and the Mackenzie Valley Act, the Planning Board developed a land use plan that provides for the conservation, development and utilization of land, water and resources. The plan is particularly devoted to the needs of the Gwich'in, while considering the needs of all Canadians. Gwich'in people should be very proud of their accomplishments as the Gwich'in Land Use plan is the first comprehensive plan completed in the NWT.

The **Protected Areas Strategy** (PAS) is an eight-step process that NWT communities can use to protect special areas of land. This process fits into a balanced land use approach that allows residents to benefit from both economic development and protecting important areas.

Communities take the lead and decide:

- ✓ Do we want to use the PAS to protect a special area of land?
- ✓ What special land do we want to protect?
- ✓ Why do we want to protect an area of land?
- ✓ What kind of protection does the land need?

The PAS is a Partnership

The NWT-PAS is a complementary, community-based tool that communities may use to meet their long-term conservation objectives in the Mackenzie Valley. Communities work with regional organizations and land claim bodies, Territorial and Federal government agencies, industry and environmental organizations to protect the land for future generations. The Protected Areas Strategy Implementation Advisory Committee was established by these partners to help guide the process. The PAS Secretariat coordinates the PAS process.

What does 'protect the land' mean?

To protect the land means to limit the amount and type of human activity on an area of land and to prevent damage to the land. Land is protected to safeguard the special natural and cultural values of the land.

The Protected Areas Strategy (PAS) process uses laws to protect areas of land. Laws give long-term protection and make it hard to change or remove the protection.

Each law offers different types of protected areas with different kinds of protection. A law may allow no development in an area and protect the surface and subsurface of the land. A law may allow some kinds of development, or development in certain places or at certain times of year.

Communities and their partners decide what kind, or how much, protection they want for an area of land. Together they choose the law and the type of protected area that fits best for the values they want to protect.

Land Use Planning and Protected Areas

Conservation areas or zones identified in land use plans may be withdrawn for an interim period of time or may be recommended for long-term legislated protection through other conservation planning processes, such as the NWT-PAS.

Materials

- Large tarp or blanket
- Moving the Stone overhead
- Protecting our Special Places video (on CD)
- Student hand out (and answer key) for video
- PAS pop up map (on CD)
- Student hand out for PAS map
- Steve Kakfwi's audio file on the PAS (on CD)
- Student hand out for audio file
- PAS cruncher (assessment tool)
- Map of the GSA (Poster to put at front of class) (on CD)
- Map of the GSA photocopied with puzzle pieces (on CD as well as in this guide)
- http://www.rangifer.net/carma/herds.html
- Pencil crayons (green, red, purple, blue and brown)
- Envelope per student

Vocabulary

- Conservation
- Habitat
- Land use plan
- Zone
- Protected Areas Strategy

Opener: The Incredible Shrinking Island

To reinforce the concept of sharing the land with other interests and the importance of planning use the following activity.

1. Place a large tarp or blanket on the floor and invite all the students in your class to stand on the tarp. It should be large enough that they have no trouble doing so.

2. Explain to the class that the tarp represents the entire available habitat to a caribou herd, including forest, eskers, tundra, wetlands, hills and valleys. (You may have to review the definition of 'habitat' with the class).

3. Tell them that someone just built a mine on their habitat. The class must get off the tarp and fold it in half. Ask them to stand on the tarp again. This time they should still all be able to stand but are closer together.

4. Ask them to name something else that could affect caribou habitat (such as a road, a number of exploration or hunting camps, a town, or a new gravel pit). Again shrink their habitat and invite them to stand again.

5. Continue playing until their habitat has shrunk so much that they can no longer stand on the tarp. This will represent the capacity of the tarp (or habitat) to sustain the population. Some of the caribou will have to 'die'.

6. Ask students to name the essential components of habitat (food, water, shelter, space) and to note that when any of these components are affected, the caribou populations become stressed.

7. In any well thought out land use plan the region will ensure that critical habitat is protected first and that the other areas are open for development.

Connector: Moving the Stone

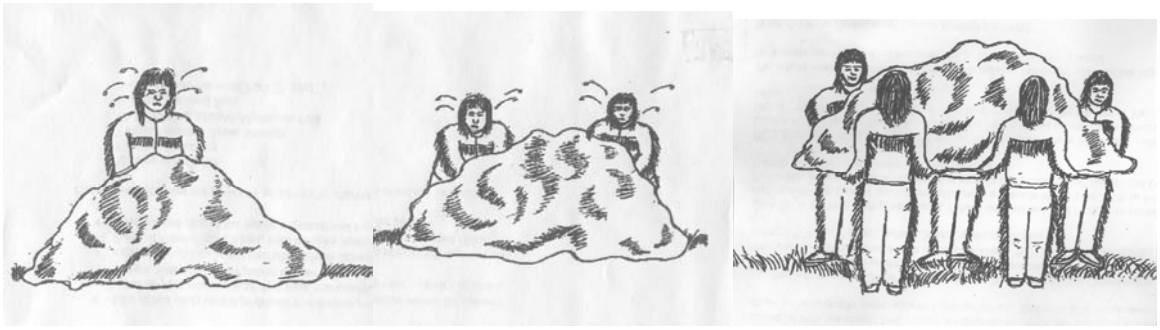
On March 11, 2007, the Honourable John Baird, Minister of the Environment and Minister responsible for Parks Canada announced the signing of a landmark agreement between Parks Canada, the Déline First Nation and the Déline Land Corporation to work towards permanently protecting and cooperatively managing Sahoyúé - §ehdacho National Historic Site of Canada. In English the areas are called 'Grizzly Bear Mountain' and 'Scented Grass Hills'.

These two western peninsulas of Great Bear Lake (Sahtu in Slavey) are important cultural places that hold many legends and are sacred places to the Sahtu Dene. These areas are the settings for oral stories containing the wisdom of the people that has been passed from generation to generation. The relationship of stories to the land is truly important; this is how the information is passed to the next generation. Protecting landscape features that relate to stories is critical to the survival of the Sahtugot'ine traditions on the land.

Parks Canada is responsible for establishing and protecting a representative system of national parks, national marine conservation areas and national historic sites across Canada. This system is recognized as one of the finest and most extensive systems of protected areas in the world. Sahoyúé - §ehdacho were designated as a single National Historic Site to commemorate the cultural values of the land. Protecting these areas along with the commemoration will help Parks Canada fulfill its mandate to present nationally significant examples of Canada's natural and cultural heritage to Canadians, today and in the future.

It took a lot of work from many different people to make this happen. Share the following story and pictures with your students to show how working together we can achieve anything.

In the rest of this unit the students will learn about tools for protecting our special places.



Drawings: by Dennis Kenny, Déline

Elders' Story: Moving the Stone

A group of people comes upon a huge stone. They must somehow move the stone. They are unable to move it working individually or in small groups. They will only be able to move the stone if they all work together, each according to his or her role in the larger task. Déline's elders say that Great Bear Lake will only be preserved and kept healthy if the many organizations, agencies and boards with a role in the management of the lake and its watershed cooperate and work sincerely together.

Morris Neyelle

Main Activity A: Protecting our Special Places – video-map-audio-assessment

There are three tools to help the students understand the Protected Areas Strategy; a video called Protecting our Special Places, audio file by Steve Kakfwi on the PAS and a map which is 'clickable' in other words, the students can manipulate it to get pop ups to find the answers to the questions on their hand-out.

There are several options for organizing the use of these materials. Provide time for each student or group of students to use the tools on their own time or use each of the tools as an entire class. Either way, to help your students understand that land provides many different values to people, complete the following:

1. Watch the video produced by the NWT Protected Areas Strategy called, Protecting our Special Places with your students.
2. Listen to the audio piece by Stephen Kakfwi (in English or Slavey).
3. View and use the pop-up Protected Areas Strategy map.
4. Hand out a copy of the work-sheets to accompany each component and have your students respond while viewing, listening and using the map. You may need to allow them to view the video or listen to the audio file more than once. Student hand outs can be found at the end of the unit.
5. Hand out a copy of the PAS cruncher (sometimes called fortune teller) to each student to answer the questions.

Main Activity B: Types of Protection

There may be some areas where communities want to allow development but put in place special measures so that development happens in a 'controlled' manner. For example, in important waterfowl nesting areas the development may be allowed only during the winter when the birds are not there. Some lands are sensitive, especially areas of permafrost. These lands may be protected by allowing the work on the land to occur only during the winter while the ground is frozen.

To get your students thinking about different types of protection, introduce the concept of a special management zone. Tell them that these are areas where development could take place but only under certain conditions.

If possible, use the site, http://www.rangifer.net/carma/herds.html. This website is run by CARMA which is the Circum Arctic Rangifer Monitoring Assessment Network. On this site students can view the entire range of all the caribou species. Using an NWT herd, such as the Bathurst caribou, ask students to find out their migration route. Using the information on the site students should be able to find out where they calve, where and when they go after they calve and where they spend the winter. Ask them to pretend they are a caribou. Can they imagine trying to protect the entire range of the caribou? It would be difficult while trying to maintain economic prosperity for the north. But, there are things that can be done. Ask your students what types of measures could be put in place to 'control' the impact of development on caribou.

Some Possibilities

- Protection of the calving and post calving grounds
- Ensuring disturbance from helicopters, exploration and noise are minimized in an area as caribou are migrating

Follow up Activity: Mapping the Gwich'in Settlement Area

The Context

Start with a map of the world. Ask one student to come up to the map and point out North America. Ask the next student to point out Canada, and the next the NWT. Within the NWT ask if anyone can point out what is the Gwich'in Settlement Area (GSA). Tell your students for the remainder of this activity they will be learning about what makes up the GSA.

Ask the class if they have ever heard of the Gwich'in Settlement Area. Ask them, 'how big is it'? 'What communities are in it'? Try to get out as much as they know. They may not know very much. Tell them that in this next activity, they will put together a puzzle showing the different areas, called zones, in the Gwich'in Settlement Area. Tell them the Gwich'in were the first to have a comprehensive land use plan and that they are a good example of using this tool to manage their land. Use the information in the backgrounder to make sure they know the answers to the above questions. Once they have a little understanding of the GSA have them do the following mapping activity.

Preparing the Map

1. Photo copy a class set of the Gwich'in Settlement Area (GSA) map (there are two 11X 17 map halves). Instruct the students to cut along the dotted lines on the piece with the lower half of the map and tape (or glue) the maps together so that the entire GSA is on one large map.

2. Photocopy the puzzle pieces for each student. There are 2 pages of pieces.

3. The students should colour each of the puzzle pieces in the colours stated (red, green, purple and blue). Don't let them start cutting until they have coloured all of their pieces.

4. Hand out an envelope for each student and have them label it, 'puzzle pieces' and make sure they put their name on it.

5. Ask them to cut out each of their coloured pieces and as they do so, keep it in the envelope so they don't lose them.

6. Once they have cut out all their puzzle pieces they should try to figure out where they go on the GSA map. Hints to help them include;

    - The dark bolded lines on some of the pieces mean that that these pieces go along the GSA boundary.
    - Some pieces have the river or large body of water on the piece and can simply be overlaid on top of the GSA larger map.

7. When they have laid out all their pieces they should check it with you. Once you have reviewed it they can start to glue.

8. Depending on how challenging the activity is for your class you may want to post a copy of the GSA zone map (one is included) for them to refer to but don't give it to them at the beginning. Rather, they should try to do it as a puzzle and work to figure it out. They'll learn more this way.

9. After students have glued the picture on the map they should check it against the posted map.

10. They should colour the 4 community zones in brown.

11. Depending on the level of your class you may want them to add more detail including the other 10 Heritage sites which were too small to make into puzzle pieces.

12. They could also shade in the Inuvialuit and Sahtu Settlement Regions and the Yukon in colours they have not used. Note: The Primary and Secondary Use Areas are in the Yukon and should be shaded accordingly.

Preparing the Legend

Underneath the title 'legend', on the map are blank boxes. Each box represents one of the zones on the map. The students should colour in the boxes with the matching colour from the pieces. The zones are;

- General Use Zones (which are already on the map and shaded grey).
- Conservation Zones (red)
- Special Management zones (green)
- Heritage Conservation zones (purple)
- Territorial Park (blue)
- Community Zones (brown)
- Primary Use Area (dark stripes)
- Secondary Use Area (light stripes)

Labelling the Map

The last stage of preparing the map is to put on the labels. The map should contain the following;

- Title (Gwich'in Settlement Area)
- 4 community names
- Mackenzie River, Arctic Red River and Peel River
- Primary Use Area
- Secondary Use Area

Zone: There are many resources the land supplies and many ways land, water and resources can be used. All land uses are important and meet different human needs. The Land Zoning System describes what is allowed or not allowed in specific areas. There are three zones in the land use plan: Gwich'in General Use Zones, Special Management Zones and Conservation Zones.

What does the map mean?

The land use planning process is a complicated topic to explain. At this level the important ideas are;

1. The map represents years of consultations (talking with people and groups to find out what is important to them).

2. The Gwich'in Land Use Planning Board has worked hard to put together the very first Land Use Plan in the NWT! It was approved in 2003. The Board is now implementing it. It is a very important part of implementing the Gwich'in Land Claim Agreement.

3. The basis of the Plan is co-operation. The Gwich'in Tribal Council, the Territorial Government and the Federal Government now all agree on how the land is managed. This is a lot to be proud of for Gwich'in people, since they were very important to making the plan and implementing it.

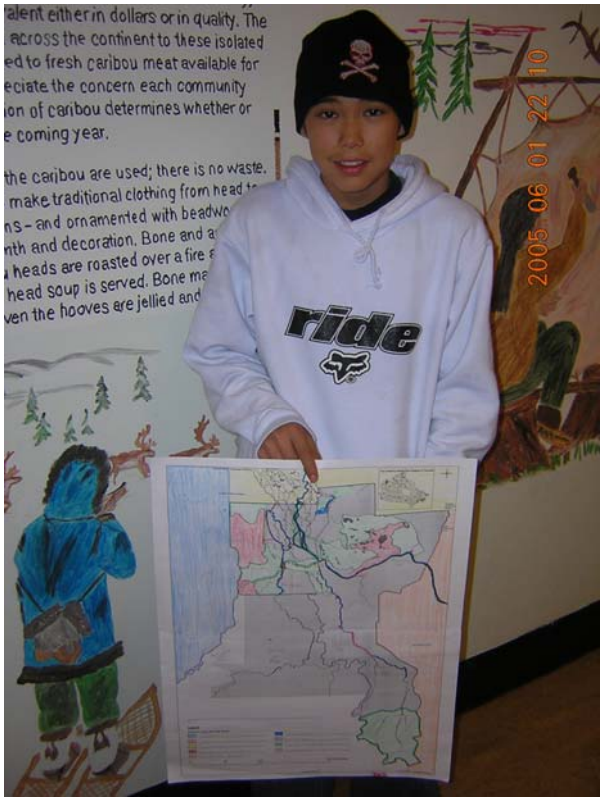
4. The zones that the students put on the map represent a different 'use' that is allowed on that land. Share the level of detail with your students that is appropriate for their understanding.

Conservation Zone – About 10% of the Gwich'in Settlement Area is in the Conservation Zone. There are 4 main areas (the red ones on the map). These areas are extra special to residents and communities of the GSA. In these areas people wanted year-round protection. This means that people can still hunt, fish and trap on the land but that there should not be any development.

Heritage Conservation Zones- There are 13 of these areas (the purple). They were chosen as very important places to people for historical or cultural reasons.

Special Management Zones – 33 % of the settlement area is in the Special Management zone. These are areas of special value to residents but where multiple use can take place. What this means is that if development takes place in these areas they have to make sure that extra care is taken.

General Use Zones – 57% of the GSA is in this area. In this area any development or activity can take place as long as it meets 'regular' standards and laws.


ride
2005 06 01 22 10


2005 06 01 23:02

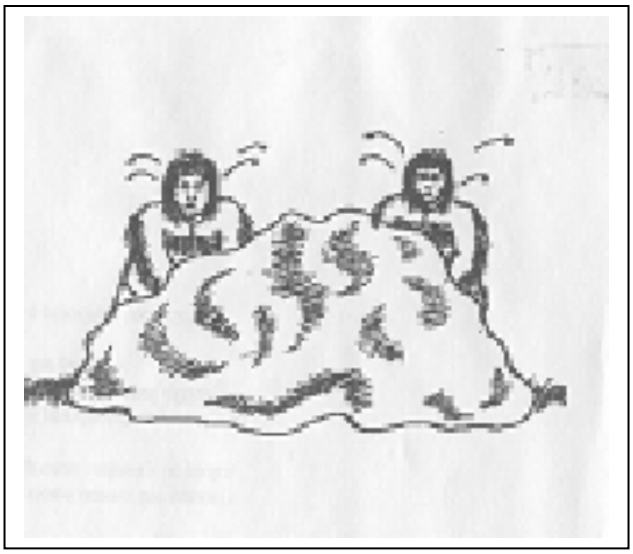

2005 06 01 23:44

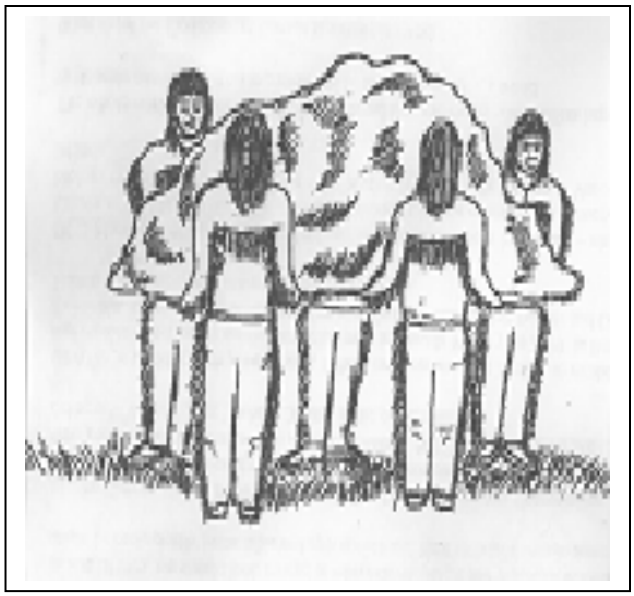
Reflection

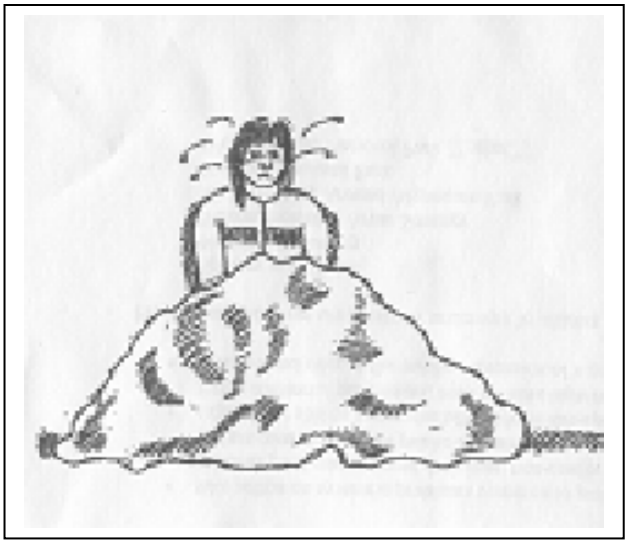
After learning everything there is to know about the bush life and surviving on the land, I have continued to carry on that life that my father has had. I live out there almost year round, using the skills of Hunting and Trapping. The only time I have to return to town is when I am in need of groceries. Living on the land is something that I never thought I would do until learning that there is so much a person can do just living out there. Today I am teaching Trapping skills, to my nephews who also enjoy being on the land. They take every opportunity to go out there and learn, also just to live out there. They enjoy the bush life.

Selwyn Kaye, Ft. McPherson, 1996.

Read what Selwyn has to say about life on the land in present times to your class. Selwyn still continues this way of life in 2007. What do they think? How much time do they spend on the land? Do they think it is still possible to have a bush life? Would they want one? Why or why not?







Protecting our Special Places

Watch the Special Places video and answer the following questions;

1. Describe at least three reasons the Elders want to protect special places.

2. Raymond Taniton says,

   'If there's no protection, there will be development. If there is development, the stories of the land will go with it".

   What do you think he means? Do you agree with him?

3. What will the protection status mean for Edéhzhíe according to Herb Norwegian?

4. What's the first step of the Protected Areas Strategy?

5. Describe your 'special place'. Where is it, and what activities do you do in that place?

Protecting our Special Places (Teacher copy with answers)

Watch the Special Places video and answer the following questions;

1. Describe at least three reasons the Elders want to protect special places.

Will vary depending on which Elders they chose.

2. Raymond Taniton says,

   'If there's no protection, there will be development. If there is development, the stories of the land will go with it".

   What do you think he means? Do you agree with him?

   Answers will vary.

3. What will the protection status mean for Edehzhie according to Herb Norwegian?

Edezhie will remain pristine. There will be no oil or gas or mineral development, no roads or logging. But, any cultural activities and hunting, fishing and trapping will continue.

4. What's the first step of the Protected Areas Strategy?

The first step is up to the communities to identify an area that they want to protect. The Protected Areas Strategy is a community driven process.

5. Describe your 'special place'. Where is it, and what activities do you do in that place?

Answers will vary.

Existing Protected Areas, National Parks and NWT PAS Initiatives

Name:_____ Date: _____

Answer the following questions using the information provided on the map.

1. Name three existing protected areas in the NWT.

2. Which existing protected area is closest to your home? What is special about that place?

3. Name an “area of interest” which is being put forward by more than one region.

4. Which step are Sahoyúé and ?ehdacho in the PAS process. What protection does this give this area?

5. Who is advancing the Pehdzeh Ki Ndeh area?

6. By looking at the map, which area looks to be the largest proposed protected area? Which is the smallest in area? What is the largest area already protected?

This is Our Land: Let's ensure it is healthy for our children and grandchildren.

Name:_____ Date: _____

Listen to the audio CD by Stephen Kakfwi and answer the following questions

1. Where did Stephen Kakfwi grow up?

2. He describes his home place as a "mini-NWT." Why?

3. What is his favourite place and why?

4. The Elders said that "keeping our land healthy keeps our people healthy." Can you explain how this is true?

5. What did Stephen Kakfwi fight for 30 years ago?

6. What work does he say is still left to be done? What is he challenging the leaders and youth of today to do?

7. If you want to protect special areas what can you do?

Bonus: Who is Stephen Kakfwi?

Instructions for Mapping Activity

Preparing the Map

1. Get two 11X 17 map halves from your teacher. Put the two pieces together so that they make one large map. The legend will be at the bottom. Cut along the dotted lines on the piece with the lower half of the map and tape (or glue) the maps together so that the entire GSA is on one large map.

2. Get puzzle pieces from your teacher.

3. Colour the pieces the colour instructed on the page.

4. Write your name on the envelope and label it 'puzzle pieces'.

5. Cut out each of your coloured pieces and put them in your envelope.

6. Once you have cut out all their puzzle pieces try to figure out where they go on the GSA map. Hints to help them include;

    - The dark bolded lines on some of the pieces mean that that these pieces go along the GSA boundary.
    - Some pieces have the river or large body of water on the piece and can simply be overlaid on top of the GSA larger map.

7. Before you glue check with your teacher to make sure you are correct.

8. Colour the 4 community zones in brown.

9. Ask your teacher if there are any other things you should be colouring.

Preparing the Legend
Underneath the title 'legend', on the map are blank boxes. Each box represents one of the zones on the map. Colour in the boxes with the matching colour from the pieces.
The zones are;

- General Use Zones (which are already on the map and shaded grey).
- Conservation Zones (red)
- Special Management zones (green)
- Heritage Conservation zones (purple)
- Territorial Park (blue)
- Community Zones (brown)
- Primary Use Area (dark stripes)
- Secondary Use Area (light stripes)

Labelling the Map
The last stage of preparing the map is to put on the labels. The map should contain the following;

- Title (Gwich'in Settlement Area)
- 4 community names
- Mackenzie River, Arctic Red River and Peel River
- Primary Use Area
- Secondary Use Area

Yukon

Northwest Territories

Inuvialuit Settlement Region

Inuvialuit Settlement Region

Inuvik

Aklavik

Fort McPherson

Tsiigehtchic

Sahtu Settlement Region

Yukon

Northwest Territories

Conservation Zones

- **A** **Ddhah zhit han, Eneekaii han, Chii gwaazraii** (Rat, Husky, Black Mountain)
- **B** **Dachan dha'aii njik / Vitreekwaa viteetshik** (James Creek / Vittrekwa River)
- **C** **Khaii luk, Nagwichoonjik, Dachan choo gehnjik** (Travaillant Lake, Mackenzie River, Tree River)
- **D** **Tsiigehnjik** (Arctic Red River)

Heritage Conservation Zones

H01. Nichìitsìi dìniinlee (Big Rock)
H02. Łenaiidląįį (Earl's Place)
H03. Vihtr'ii tshik (Thunder River)
H04. Teetshik goghaa (Old Arctic Red River)
H05. Eltyin choo chihvyàh k'yit (Jackfish Creek)
H06. Martin Zheh (Martin House)
H07. Hehnjuu deetł'yah tshik (Bernard Creek)
H08. Tr'ih zhit tagwehdii (Destruction City)
H09. Nagwichoo tshik (Mouth of the Peel)
H10. Nataiinlaii (8 mile)
H11. Shìłdii (Shiltee Rock)
H12. Dèeddhoo gòonlii (Many Scrapers)
H13. Tł'oondih

Special Management Zones

1. **Vàdzaih** (Porcupine Caribou)
2. **Gwatoh Taii Tshik** (Stoney Creek)
3. **Teetł'it gwinjik** (Peel River and Channel)
4. **Neeghaii zhoo tshik, Neeghaii zhoo van** (Frog Creek and Lake)
5. **Gwìeekajìlchit tshik** (Campbell Creek)
6. **Nichìitsìi Dìniilee** (Campbell Hills)
7. **Nagwichoonjik Njuu Kat** (Mackenzie Islands)
8. **Khąįįląįi** (Rengleng River)
9. **Tsiigehtshik** (Mouth of the Arctic Red River)
10. **Cardinal Lakes**
11. **Van Kat Khaii Luk Gwindii** (Lakes around Travaillant Lake)
12. **Nagwichoonjik** (Mackenzie River)
13. **Tsiigehnjik** (Arctic Red River)
14. **Daazrąįi van k'adh, Daazrąįi van k'adh tshik** (Swan Lake and Creek)
15. **Tsiigehtshik Gwit'lit** (Headwaters of the Arctic Red River)
16. **Transportation**

General Use Zones

Gwich'in Territorial Park

Community Boundaries

Gwich'in Settlement Area Boundary

Dempster Highway

Inuvialuit/Sahtu Settlement Region Boundary

Territorial Border

GWICH'IN LAND USE PLANNING BOARD

NÀHN' GEENJIT GWITR'IT T'IGWAA'IN / GWICH'IN LAND USE PLAN

Yukon Territory

Northwest Territories

Inuvialuit Settlement Region

Dempster Highway

Sahtu Settlement Area

The Gwich'in Settlement Region in Canada

N
W
E
S

Inuvialu
Settlem
Region

Sahtu
Settlem
Area

Sahtu Settlement Area

Yukon Territory

Northwest Territories

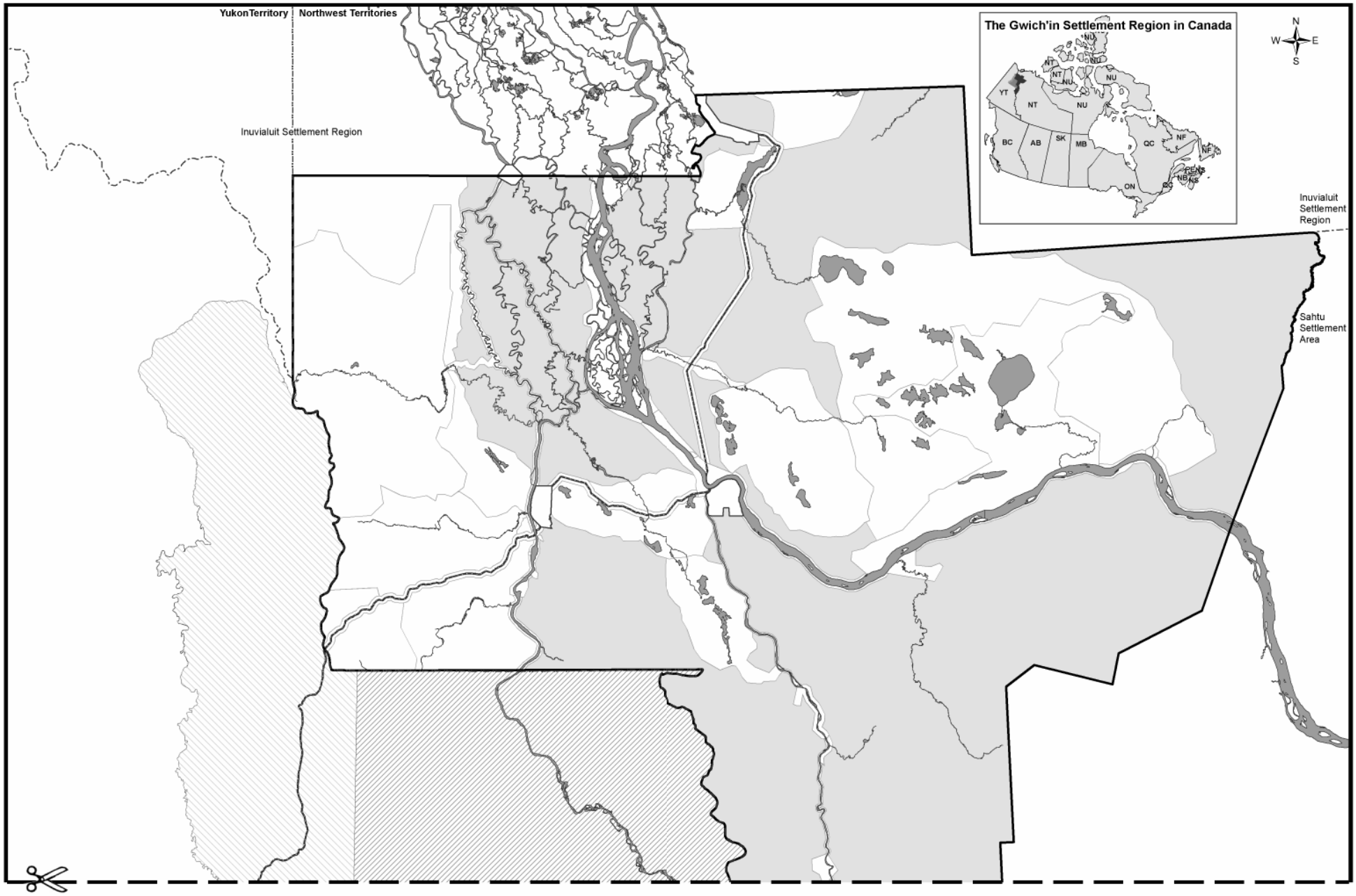
Legend

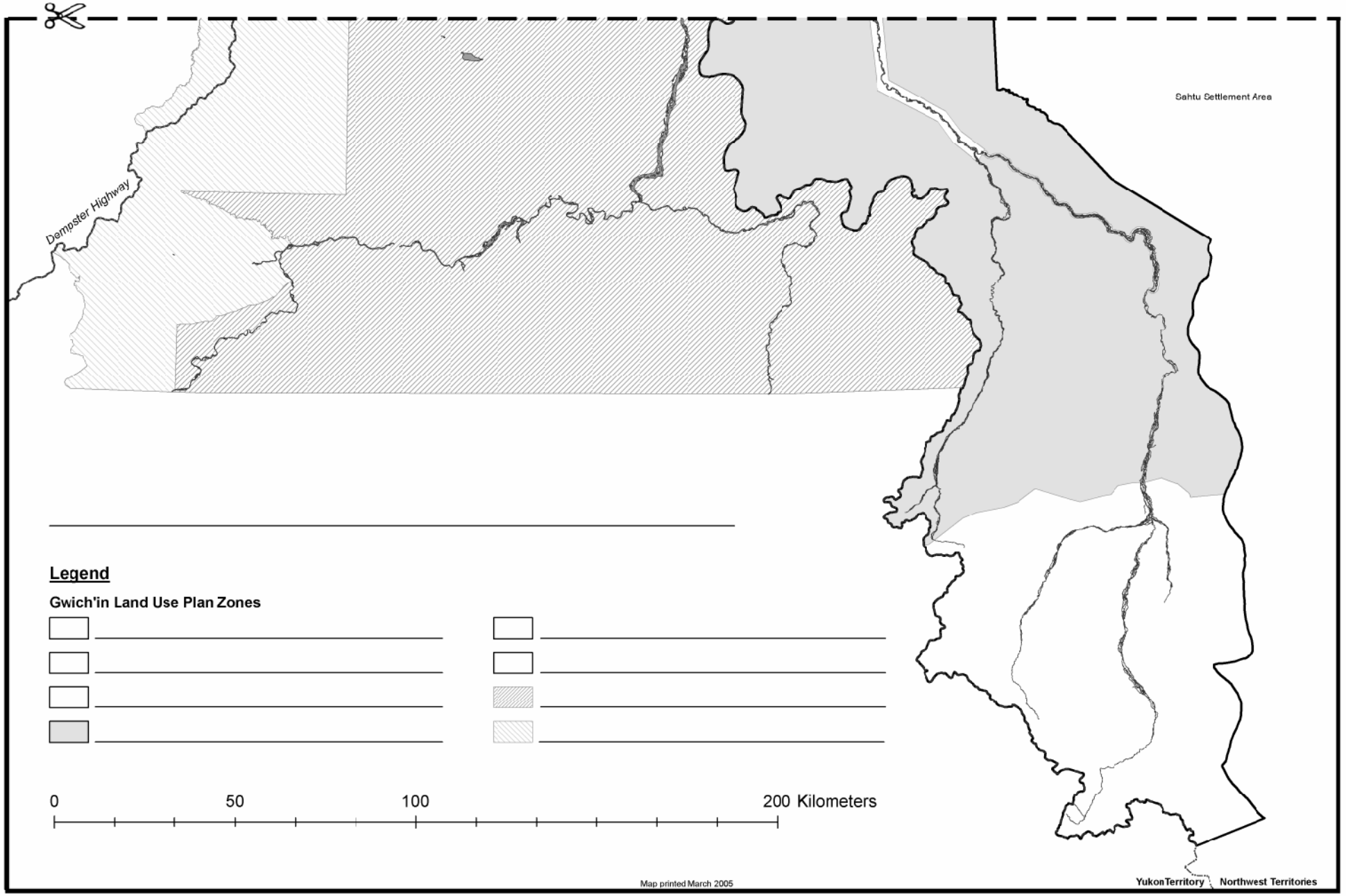
Gwich'in Land Use Plan Zones

0 50 100 200 Kilometers

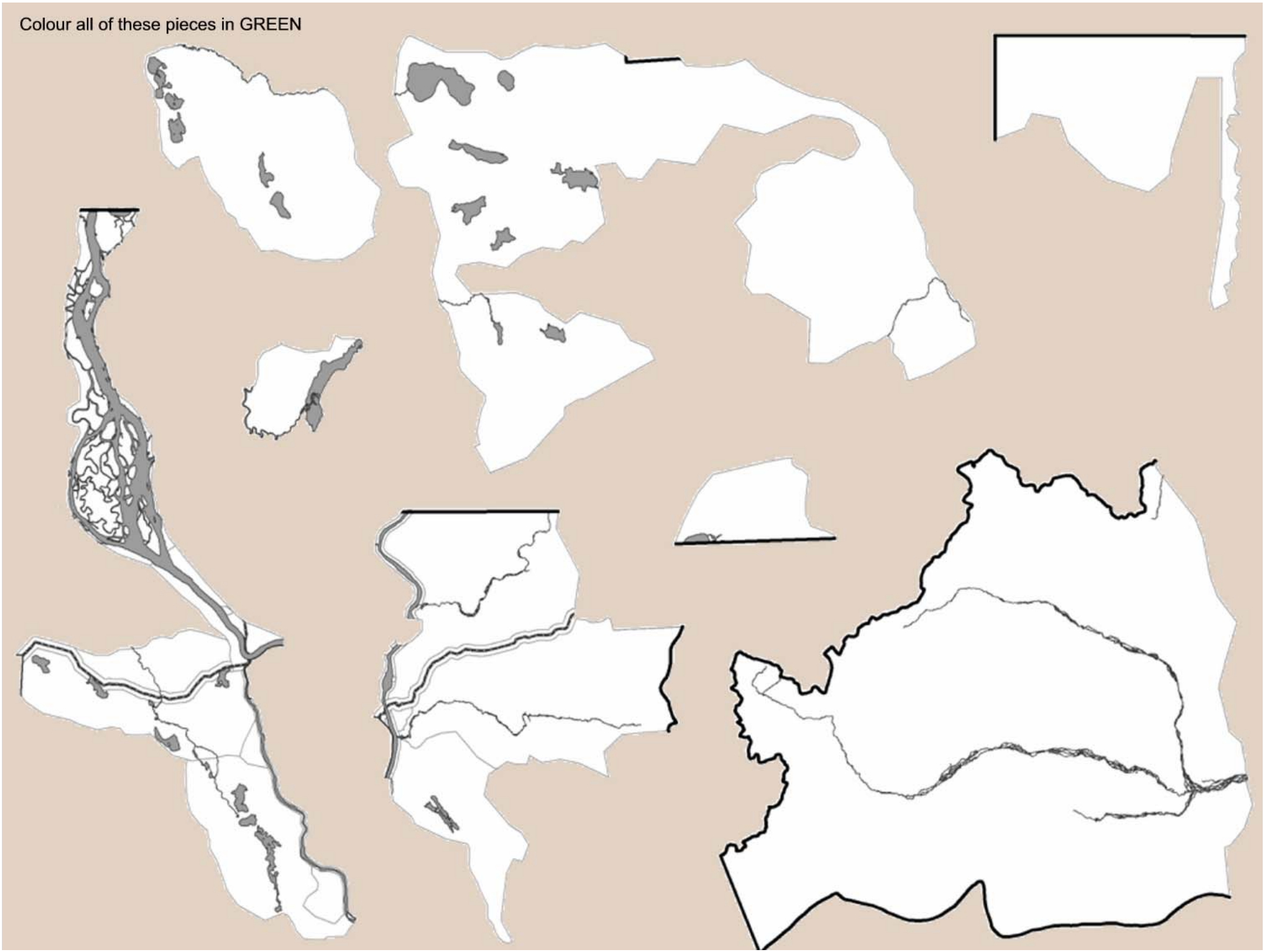
0 50 100 200 Kilometers

Map edited March 2005

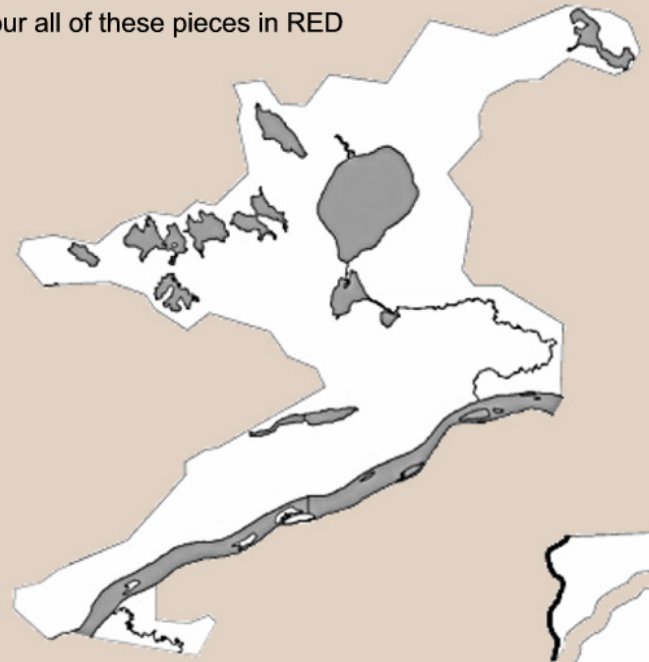

YukonTerritory
Northwest Territories
Inuvialuit Settlement Region
The Gwich'in Settlement Region in Canada
N
W
E
S
YT
NT
NU
BC
AB
SK
MB
ON
QC
NF
PEI
NS
NB
Inuvialuit Settlement Region
Sahtu Settlement Area


Sahtu Settlement Area
Dempster Highway
Legend
Gwich'in Land Use Plan Zones
0
50
100
200 Kilometers
Map printed March 2005
Yukon Territory
Northwest Territories

Colour all of these pieces in GREEN



Colour all of these pieces in RED



Colour all of these pieces in PURPLE

Colour all of these pieces in BLUE

Unit 7: Putting it all Together

Knowledge and Values Learning Outcomes

Students will research a chosen topic and use all the skills developed in first 6 units in their final project. Their research project can be used to assess their overall learning from the module.

Skills and Processes

Social Participation

4-S-003 accept and offer constructive suggestions in order to build consensus and compromise

Communication

4-S-007 actively listen to accounts and points of view of others

4-S-014 edit and revise work written

Creative and Critical Thinking

4-S-019 draw conclusions based on information from a variety of sources

4-S-020 evaluate personal assumptions based on new information and ideas

Global connections

4-K-G-035 identify ways in which the peoples of our territory were and are connected to other peoples and other parts of the world, *e.g. circumpolar peoples and countries, languages, travel, jobs.*

Theme 4 - Living in the NWT

Citizenship

4-K-C-036 explain from a personal perspective what it means to live in / be a citizen of the NWT and Canada Identity

4-V-I-012 value their identity as citizens of the NWT

4-K-I-041 demonstrate awareness that belonging to more than one culture or community can affect identity (e.g. Living in a community and having to travel to a job site for work)

4-K-I-042 demonstrate understanding that their Canadian identities are shaped by living in Northern Canada (housing, clothing, recreation, transportation, food, relationships with the land)

4-K-I-042A demonstrate understanding that their identities are connected to the history of their First Nation, Inuit, or Métis communities

Materials

- Social impacts of mining handout
- Puzzle pieces with mining/forestry/tourism pictures glued

Vocabulary

- Social impact
- Perspective

Opener: Varying Perspectives

Ask your class from the list below which one does not belong…

Beaver
Otter
Muskrat
Buffalo

Some of your class may say the buffalo as it is the only animal listed that doesn't spend much of its life in the water. Others in your class might say the muskrat as it is the only one listed that isn't an airplane. Some others may say otter as it might be the only animal that they haven't eaten. Others may say something altogether different.

The important part to think about is that we all have a different perspective. One is neither wrong nor right but we view the world from this perspective. For example, the beaver may be seen as a beautiful animal, a food source or a trade item depending on who the viewer is. The different perspectives one has should be kept in mind during all of the lessons.

Connector: Social Impacts of Mining[7]

This activity focuses on the positive and negative effects of mining developments on society in the NWT. There are a variety of impacts that mining has on a region, from an improvement in economics to stress on the family due to rotational work schedules (i.e. two weeks in / two weeks out).

1. First ask the students if they can think of a good thing that might occur if a new mine opened in their region. Accept any reasonable answer.

2. Next ask the students if they can think of a bad thing that might occur if a new mine opened in their region. Accept any reasonable answer. Tell the students that they will now consider social impacts of mining development.

3. Read through the Student Handout: Social Impacts of Mining.

4. Have the students go back through the list individually and mark the effects with either a positive or negative sign depending on they feel about the given effect. Answers will vary.

5. Discuss with the class which effects they feel are positive and negative.

6. Have the students brainstorm what the community could do to lessen the negative impacts of mining development. For example: plan activities around work schedules; create support groups or programs to minimize the separation stress experienced by families; create addiction response programs and support groups; offer courses on budgeting for new monies coming into the family; offer cultural training, delivered by

[7] Adapted with permission from the Government of Nunavut Earth Science module, written by Peter Maguire.

members of the community to ensure new people in the community understand its values and traditions; etc.

7. Inform the students that mining companies cannot just start up a mine wherever they want. There are licenses, permits and regulations that must be received and followed in order for permission for a development to proceed.

Main Activity: Group Project

Forming Groups

Depending on the nature of your class you may want to assign particular groups to work together or you may allow them to choose. Alternatively you could do the following activity which will randomly select groups.

1. Select images from magazines or posters of each of the following;
    - Mining related image
    - Oil and Gas related image
    - Fur and trapping related image
    - Forestry related image
    - Tourism related image

2. Glue the images to the back of Bristol board. Make sure the backs are all the same colour so that students are not finding their group simply by the colour of the backing.

3. Cut each image into puzzle pieces depending on the number of students you want in each group. For example, if you have a class size of 20 you would need four puzzle pieces for each of the five images.

4. Hand out the puzzle pieces randomly (you could ensure students that you don't want to work together (or do) don't get the same pieces and they will think it was random).

Group Project

Throughout the module students have been given the basics of resource development in the NWT. They have looked at renewable and non-renewable resource economies and studied the social and environmental implications of industry as the economic opportunities. With all of their new knowledge each group needs to complete a group report on their assigned topic. Select headings from the following list to ensure each group completes the minimum you require.

- Definition of industry
- Locations where active in the NWT (use map)
- Benefits to community and NWT
- Any negative aspects for NWT and or community
- Types of products
- Where products are used around the world
- History of Industry in NWT
- Specific example in detail (select one mine, one fur trader, one gas field, one outfitting company)

Follow-up Activity: Poster and Oral Presentation

Assign each group to present their information to the larger class. Ensure each member in the group participates.

Social Impacts of Mining

Date: _____ Name: _____

Mining development has many impacts on society. Some of these impacts are positive and some are negative. Consider the list of some social impacts of mining development:

Social Impacts		
Type		Positive and Negative Effects
Social	Shift work / Rotational Work	❑ Less time to spend on traditional activities. ❑ Workers and their families are separated for several days or weeks. ❑ More money into the family and community. ❑ Members leaving the community (because they now have money and good-paying jobs). ❑ Members leaving their skilled jobs in the community to take mining-related jobs.
Economic	Increased employment levels. Increased income levels.	❑ Increased training and skill development opportunities. ❑ Increased buying power. ❑ Creates positive role models. ❑ More money flowing into a community. ❑ Some people will have lots of money while others won't.
Cultural	Strangers in the community	❑ Increased population. ❑ More people using services (health care, education, housing) ❑ People bringing in new ideas and ways of living.

For each of the effects decide if it is a positive or a negative. Put a plus sign (+) in the box of effects that are positive and a negative sign (-) in the box of effects that are negative.

NWT Resource Development Kit

Appendix A

A collection of Timeline Cards with dates and information which will provide the teacher with a starting point for this activity

Front Fold Back

1670

The Fur Trade Begins

- Hudson's Bay Company (HBC) was formed and given exclusive rights to trade in 'Rupert's Land' by King Charles II
- Furs, an NWT resource, became commodities which were bought and sold

KEY EVENT TIMELINE TICKET #3
GNWT Resource Development EDUKIT

Rupert's Land included all of the land in the areas where rivers flowed into Hudson's Bay (its watershed area).

The HBC encouraged Aboriginal groups to bring their furs to a series of forts near Hudson's Bay itself.

Furs were traded for goods the Aboriginal people had been unable to attain in the past, like guns, flour, beads, blankets, etc.

SOURCE:
NWT History Timeline. (2002). Yellowknife, NT: GNWT Education, Culture and Employment

Fold Here & Glue Back-to-Front

1714

Fur Trade Arrives in the NWT

- Thanadelthur, a 15 year old Chipewyan girl helped make peace between her people and the Cree
- Thanks to her courage and leadership, the HBC could now establish trade with the Chipewyan who lived in the Great Slave Lake area

KEY EVENT TIMELINE TICKET #4
GNWT Resource Development EDUKIT

A conflict between the Cree and Chipewyan tribes made trade impossible for the HBC. The Chipewyan could not reach the Fort to trade their goods without crossing Cree lands.

Thanadelthur led 150 Cree and HBC representatives on a 10 month expedition from York Factory to the NWT.

2001: she was designated '*Person of National Historic Significance*' in recognition of her contributions to this peace-making effort.

SOURCE:
NWT History Timeline. (2002). Yellowknife, NT: GNWT Education, Culture and

1786

Metis and the Fur Trade

- Contact between Aboriginal peoples and those of European (primarily French ancestry) led to new families which combined traditions from both cultures
- The Metis played a central role in the fur trade, exploration and navigation of the North

KEY EVENT TIMELINE TICKET #5
GNWT Resource Development EDUKIT

Unlike the HBC, the North West Company (made up of the French fur trading companies) traded for furs 'in the field' far from their bases in Montreal.

Metis people of the Mackenzie region became vital translators, traders, middlemen, navigators and guides for fur companies and explorers.

Their rich heritage is very much a part of the North.

SOURCE:
NWT History Timeline. (2002). Yellowknife, NT: GNWT Education, Culture and Employment

Fold Here & Glue Back-to-Front

1889-1907

Mackenzie Delta Whaling

- Bowhead whales were hunted almost to extinction in the Arctic
- In the 19th century demand for products made from blubbler and baleen made whaling a profitable business
- In the 1890's Herschel Island became a year-round centre for the whaling industry

KEY EVENT TIMELINE TICKET #6
GNWT Resource Development EDUKIT

Traditionally, Inuit hunted the whale for its meat, blubber, and oil. One whale could sustain a small camp over the winter. Its bones and baleen were used for making tools; nothing was wasted.

Inuit were of valuable assistance to the whalers as hunters, guides and workers. Economic life soon centered around working for a wage. This caused problems when the whaling industry collapsed in 1907.

SOURCE:
NWT History Timeline. (2002). Yellowknife, NT: GNWT Education, Culture and

1905

Gold

- Gold discovered in Yellowknife would later lead to the 1930's NWT Gold Rush
- Some NWT gold mines included:
  - Con 1938-2003
  - Negus 1939-1952
  - Giant 1948-2004
  - Discovery 1950-1969
  - Lupin 1982-1998-2004

KEY EVENT TIMELINE TICKET #7
GNWT Resource Development EDUKIT

Some of the people who contributed to these gold discoveries include:

- Dr. Fred Jolliffe, Tennejonn, and Neil Campbell (Con)
- Johny Baker, Dr. S.A. Dadson (Giant)
- Alfred Giauque (Discovery)

Yellowknife grew from a small bush camp settled by prospectors and miners involved in the mining industry to become the NWT's capital city.

SOURCE: Humphries ,W. & Silke, R. (2005). Handout: *Historic Mines of the NWT prepared for the George Hunter Photography Show*

Fold Here & Glue Back-to-Front

1920's

Mackenzie Delta Oil and Gas

- Oil was discovered at Norman Wells
- The first oil well was soon put into production
- By 2005, the area would continue to be a major producer of oil in Canada

KEY EVENT TIMELINE TICKET #8
GNWT Resource Development EDUKIT

This 1920's discovery was the beginning of the NWT's oil and gas industry.

In 1942 the US Army built the Canol road and pipeline to transport oil from Norman Wells to Whitehorse, Yukon. They needed this to help build the Alaska Highway during the war.

In the 70's oil & gas exploration would boom on and off-shore in the Beaufort Deta Region after a large oil discovery in Alaska.

SOURCE:
Campbell, Darren. (Spring 2005). Will Tuk Boom Again? *Far North Oil & Gas, p.56-58*

1930's

From Fur to Minerals

- In 1934 the value of mineral production was more than fur for the first time in NWT history
- Mineral, oil and gas discoveries began to change the northern economy
- Oil at Norman Wells
- Radium & uranium at Port Radium
- Gold in Yellowknife

KEY EVENT TIMELINE TICKET #9
GNWT Resource Development EDUKIT

During the fur trade era, Dene people had come to depend on trapping for 95% of their income.

At this time however, furbearer populations and prices were at an all time low, and trading posts closed.

Although the northern economy now had the mineral, oil and gas industries to depend on, no Aboriginal people were involved in prospecting or mining.

SOURCE:
NWT History Timeline. (2002). Yellowknife, NT: GNWT Education, Culture and Employment

Fold Here & Glue Back-to-Front

1974-1977

Mackenzie Valley Pipeline Inquiry and Berger Report

- A group of gas companies from southern Canada wanted to build a pipeline
- It was to run from Prudehoe Bay, Alaska, through the northern Yukon and the Mackenzie Valley to the Central United States
- Cost was estimated at $8 billion

KEY EVENT TIMELINE TICKET #10
GNWT Resource Development EDUKIT

Justice Thomas Berger spoke with over 1000 people from the NWT and heard their views on the pipeline. He found that 'progress' meant different things to different people.

In the end, Berger said that the people must be full and willing participants in the project. The pipeline wasn't built.

This laid the foundation for a future where companies and Aboriginal groups would negotiate a number of benefits before development could happen. *Example: employment, training, business development and land access.*

SOURCE:
Campbell, Darren. (Spring 2005). Will Tuk Boom Again? *Far North Oil & Gas, p.56-58*

1984

Land Claim Agreements

- Land claims have been called 'modern treaties'
- NWT settled Land Claims:
  - 1984 Inuvialuit
  - 1992 Gwich'in
  - 1993 Shatu Dene/Metis
  - 2002 Dogrib
- In 2005 self-government negotiations continue, but the two are not the same thing

KEY EVENT TIMELINE TICKET #11
GNWT Resource Development EDUKIT

Comprehensive land claim agreements are negotiated to make sure that Aboriginal people can control their traditional lands and benefit from development. These rights include:

Land ownership; wildlife harvesting; participation in all land, water, wildlife and environmental management; financial compensation; resource revenue sharing; certain ways to stimulate economic growth; and a role in managing heritage resources and parks.

Self-government arrangements recognize that Aboriginal groups have traditionally organized and governed themselves, and they have the right to continue to do so.

SOURCE:
NWT History Timeline. (2002). Yellowknife, NT: GNWT Education, Culture and Employment

Fold Here & Glue Back-to-Front

1990's

NWT Diamond Rush!

- 1991 Diamonds discovered
- Largest diamond staking rush in North American history happens in the NWT
- Thousands of acres staked
- 1998 BHP opens Canada's 1st diamond mine –EKATI (expected to last 20 years)
- 2003 Diavik begins diamond production (16-22 yr. mine life)

KEY EVENT TIMELINE TICKET #12
GNWT Resource Development EDUKIT

BHP Billiton's diamond mine is expected to average about 4.5 million carats each year. Diavik's production is expected to peak at around 8 million carats per year.

Impact benefit and Socio-economic agreements now ensure that Aboriginal people and other northerners benefit from resource development.

Many Aboriginal people are now employed with the mines. Education and work-related training programs are available. Many goods and services are provided to industry by Aboriginal-owned businesses.

SOURCE: Meredith, Gayla. (2004). *Canada's Northern Diamonds …from rocks to riches.* Yellowknife: Northern Ink Limited

Timeline Reference List for Teachers

Resource Development Kit - Dates and Events for Discussion

15 000 to 30 000 years ago
NWT almost completely
covered by sheets of ice

The Mackenzie Delta, northern Yukon, Alaska, eastern Siberia and the land west of Banks Island remain ice-free

10-15 000 years ago
End of last Ice Age

Prior to the time often called 'Pre-contact', the Dene and Innuvialuit people lived on the land and used its resources for survival.
**Note: See Social Studies Kit: Stories of our Origins and learn more about the Aboriginal people's early relationship with the land and its animals. Community elders are also a wealth of information.*

1000 – 1014 AD
Vikings arrive in Canada

1576
Ongoing/continual contact established between the northern Aboriginal peoples and Europeans

Martin Frobisher names Frobisher Bay on Baffin Island (present day Iqaluit).

Frobisher returns to Europe with 'black ore' thought to have been gold, but it was only 'fool's gold' or pyrite. He didn't find gold, but he did find a land rich in fish and wildlife

1670
Hudson's Bay Company established

Fur Trade begins; a time when resources became commodities to be bought and sold

1714

The fur trade comes to the NWT when Thanadelthur (a young Chipewayn girl) guides an expedition to negotiate peace between the southern Cree and northern Chipewyan people for the Hudson's Bay Company

1763

Royal Proclamation of 1763

- Aboriginal peoples should not be disturbed in their use and enjoyment of the land
- Set the framework for negotiation based on co-operation rather than conquest.

1769

Samuel Hearne, guided by Matonabbee, searched for Copper near present day 'Coppermine' aka Kugluktuk

(Dene and Inuvialuit have been using copper for thousands of years)

1779

North West Company established; French trading companies joined forces; origins of the Métis (people with both Aboriginal & European/French roots)

1786

Fur Trade along Deh Cho River (Mackenzie) in search of fish, forests & wildlife; beaver pelts important

Old Fort Providence fur trade post established

Slave Lake Fort fur trade post established

1789

Fort Chipewyan fur trade post established

1800's

Introduction of disease to Aboriginal people through contact with whalers and traders (influenza, smallpox, measles, scarlet fever and tuberculosis)

1804

Great Bear Lake fur trade post established

1821

NWC & HBC merge

Many forts closed; jobs & way of life lost

1850
30,000 marten furs are exported each year from the Mackenzie District

Golden Era of fur trade ends

1860's
Mission schools began to open in NWT; Fort Providence had one of earliest schools

1867
Confederation of Canada

1870
HBC sells the Northwestern Territory to Canada

Riel uprising

Province of Manitoba created out of a portion of the Northwest Territories

1875
NWT Act passed: NWT becomes a Territory

1880's
Great Britain cedes the Arctic Archipelago to Canada

1883
Capital of the NWT moves from Battleford to Regina

1888
First true NWT Legislative Assembly replaces the Territorial Council.

1889 – 1907
Mackenzie Delta Whaling

American Whalers arrive at Herschel Island
- Blubber oil used for lamp fuel, ingredient for soap, lubricant, tanning leather,

- Baleen –corsets, buggy whips, umbrellas, carriage wheels, fishing rods,
- 20th century a whale could be worth $15,000 (currency of the day)

1890's
Trade in muskox robes established with the disappearance of the Buffalo; provided income for northern people

1898
Yukon Territory created

Klondike gold discovery initiates largest Gold Rush in North American history

1900's
Muskoxen hunted to near extinction

1905
Alberta and Saskatchewan created

Gold discovered in Yellowknife

Capital of the NWT moves to Ottawa

1907
Collapse of the whaling industry; most whalers abandon the Arctic; Aboriginal people had become dependent on trade goods and the industry had now gone 'bust'

1920's
Oil discovered at Norman Wells and NWT's first oil well goes into production

Bush planes become important methods of transportation for mineral exploration

Rise in fur price in Western Arctic; white fox provide main source of income for Inuit (most valuable export until 1946)
1928

Influenza epidemic reduces population of entire NWT; Aboriginal communities along the Mackenzie River devastated; many leaders and elders die; communities take years to recover

1930's
NWT Gold Rush

1930
Great Bear Lake: Gilbert Labine discovers Radium Deposit

1933 (to 1940)
1st NWT commercial mine:
Eldorado Mine at Port Radium on shores of Great Bear Lake
(uranium, radium, silver, cobalt, bismuth and copper)
When Eldorado first opened, 1 gram of radium was worth $100,000 but this quickly dropped to $25,000/g when more sources were discovered

1934
Gold Rush to Yellowknife

1938
Con Mine opens - Gold

1939
Fur prices crashed & trading posts closed as the value of mineral production exceeds the value of furs for the 1st time
(but no Aboriginal people were employed in prospecting or mining)

1939-45
War II

1942
Eldorado Mine re-opens to fill wartime needs

1942
US Army builds Canol road and pipeline to transport oil from Norman Wells to Whitehorse (oil need for wartime efforts)

1948
Giant Mine opens (gold)

Mackenzie Highway reaches Hay River

1950's
Aboriginal families move from bush camps to settlements; children attend first
community-based schools

1951
Territorial Council meets in the NWT for the first time since

1960
Eldorado Mine closes for 2nd time

Mackenzie Highway now ends in Yellowknife

NWT Aboriginal people given right to vote in federal elections

1962
Cantung Mine opens –tungsten

1964
Pine Point Mine opens –lead/zinc

Oil drilling activity in the Mackenzie Delta

1967
Yellowknife becomes capitol city of the NWT

NWT government transferred from Ottawa to Yellowknife

1968
Prudhoe Bay, Alaska oil field discovery

1969
Lupin gold discovery

1970's
Oil exploration boom in Tuktoyaktuk (industry reacts to increased prices in the 1970's; this will also occur during the 1980's and begin again in 1999)

Natural gas discoveries in Mackenzie Delta near Inuvik

Oil and gas to change the economic balance in the North

Formation of powerful Aboriginal organizations: Indian Brotherhood of the NWT (IBNWT)

1972
Wally Firth –first Aboriginal elected as a Member of Parliament

1973
Live broadcast television available in NWT

1974
March: Mackenzie Valley Pipeline Inquiry is established with Justice Berger

Canada approves Beaufort Sea oil exploration

1975
First fully elected council in the NWT

1976
Division of NWT into NWT & Nunavut Proposed

1975 and 1977
Canada agreed to negotiate comprehensive land claims with the Dene Nation and the Métis Association of the Northwest Territories

First NWT Council elected by northerners

1976
Nanisivik lead/zinc mine opens

1977

Berger Inquiry recommends 10-year moratorium on construction of Mackenzie Valley Pipeline. This Inquiry was fundamental in changing the ways companies dealt with local people. It laid the framework to ensure that Northerners were full and willing participants in resource development.

Indian Brotherhood of the NWT becomes the Dene Nation

1980's
NWT seal and fur markets collapse due to boycotts; hunters & trappers' income drops by up to 90%

Many NWT communities begin the process of reclaiming their Aboriginal names

Renewed interest in NWT oil and gas driven by market demands (barrel of oil @ $50)

1981
Polaris lead/zinc mine opens

1982
Just over 50% of NWT voters in favor of division to create new territory - Nunavut)

Lupin gold mine begins production

1983
Richard Nerysoo first Aboriginal Premier in Canada

1984
June 5: Inuvialuit first Aboriginal Canadians from the Northwest Territories settle land claims with the Government of Canada

NWT Official Languages Act passed; now 8 official languages in NWT

1988
September: signing of a Land Claim Agreement-in-Principle by Canada, the Dene/Métis and the NWT Government

1990
November: Land Claim negotiations began with the Gwich'in

Price of sealskin in the 1990's around $10-15

1991
Charles Fipke and Stewart Blusson discover diamonds near Lac de Gras, NWT

Aber stakes mineral claims for future Diavik Mine site

NWT Diamond Staking Rush begins

Nellie Cournoyea first female Premier in Canada

1992
Gwich'in land claims settlement

1993
Nunavut Act signed

1994
Sahtu Dene/Métis land claims settlement

1995
Jericho diamond pipes discovered
(Contwoyto Lake, NT)

NWT fur industry 'rebounds'; fur volumes and prices improving

1997
Snap Lake diamond discovery

Construction begins at BHP's EKATI mine site

1998
Canada's 1st diamond mine opens –EKATI Diamond Mine

1999

Nunavut created from the division of the NWT

Renewed interest in Tuktoyaktuk and Beaufort Delta oil and gas shown by industry

Sirius Diamonds opens NWT's first diamond cutting and polishing factory

Value of qiviut (under fur of muskox) gains strength as demand increases for product

2000
NWT Population: 42,083
(Approximately half the population is Aboriginal)
33 Communities

NWT production of gold, silver and diamonds $487 million

2001
Diavik diamond mine construction begins

2002
Three mines operating in NWT; 2 diamond – 1 gold

$37.7 million spent on NWT exploration projects: 26 for copper, gold, tantalum and silver; 33 for diamonds

Price of sealskin $80-100

Dogrib land claims settlement

National Aboriginal Day officially recognized in NWT

2003
Diavik begins producing diamonds

October –Federal government announces $85 million for NWT road and bridge projects

November –Con Mine closes

NWT's 2 diamond mines produce 9.2 million carats

12% of world diamonds produced in Canada; now 3rd largest producer of diamonds (by value) in the world

2004
All licences and permits in place for the Snap Lake diamond project

Active diamond exploration in many areas of the NWT and Nunavut

Value of NWT fur harvest estimated around $800,000

2005
Construction begins on the Snap Lake diamond mine

Construction begins at the Jericho site-Nunavut's first diamond mine

Last half of 2005
World oil prices climb from $30/barrel to over $65

Aboriginal self-government continues to being negotiated across the NWT

Important Dates (Politics)

1867 Confederation of Canada
1870 HBC sells the Northwestern Territory to Canada.
-Riel uprising and formation of province of Manitoba out of the NWT.
1875 NWT Act passed
1880 Great Britain cedes the Arctic Archipelago to Canada
1883 Capital of the NWT moves from Battleford to Regina
1888 First true Legislative Assembly replaces the Territorial Council.
1898 Yukon created
1906 Alberta and Saskatchewan created
-Capital of the NWT moves to Ottawa
1951 NWT Act amended. Representation from the NWT is mandatory on the Territorial Council and meets in the NWT for the first time since 1905.
1967 Capital of the NWT moves to Yellowknife
1975 First fully elected council in the NWT
1983 Richard Nerysoo first Aboriginal Premier in Canada
1985 Last powers handed over by the Commissioner of the NWT