

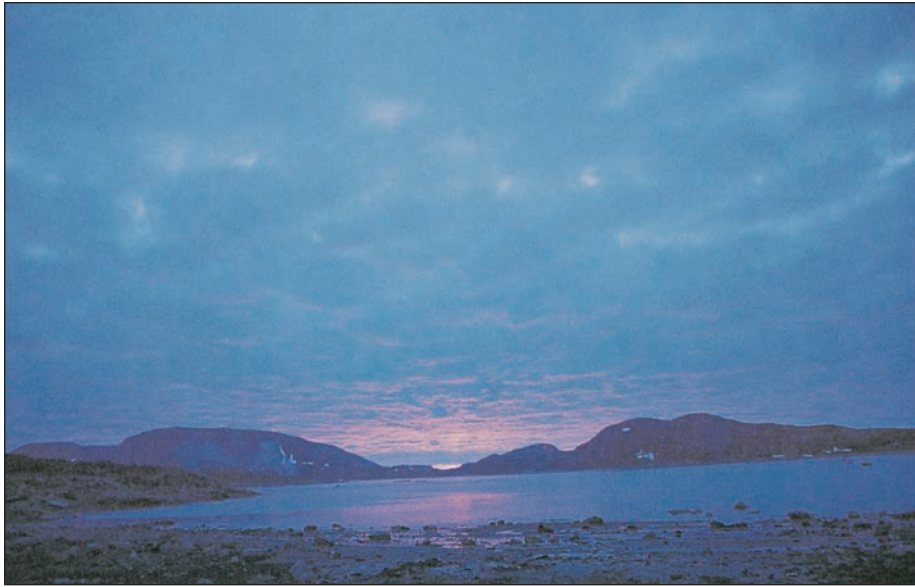






**PART I**

**RELATIONSHIP  
TO THE  
ENVIRONMENT**



*Photo: T. Macintosh*

Kinngait, Cape Dorset



*Photo: T. Macintosh*

George Kamookak, Gjoa Haven



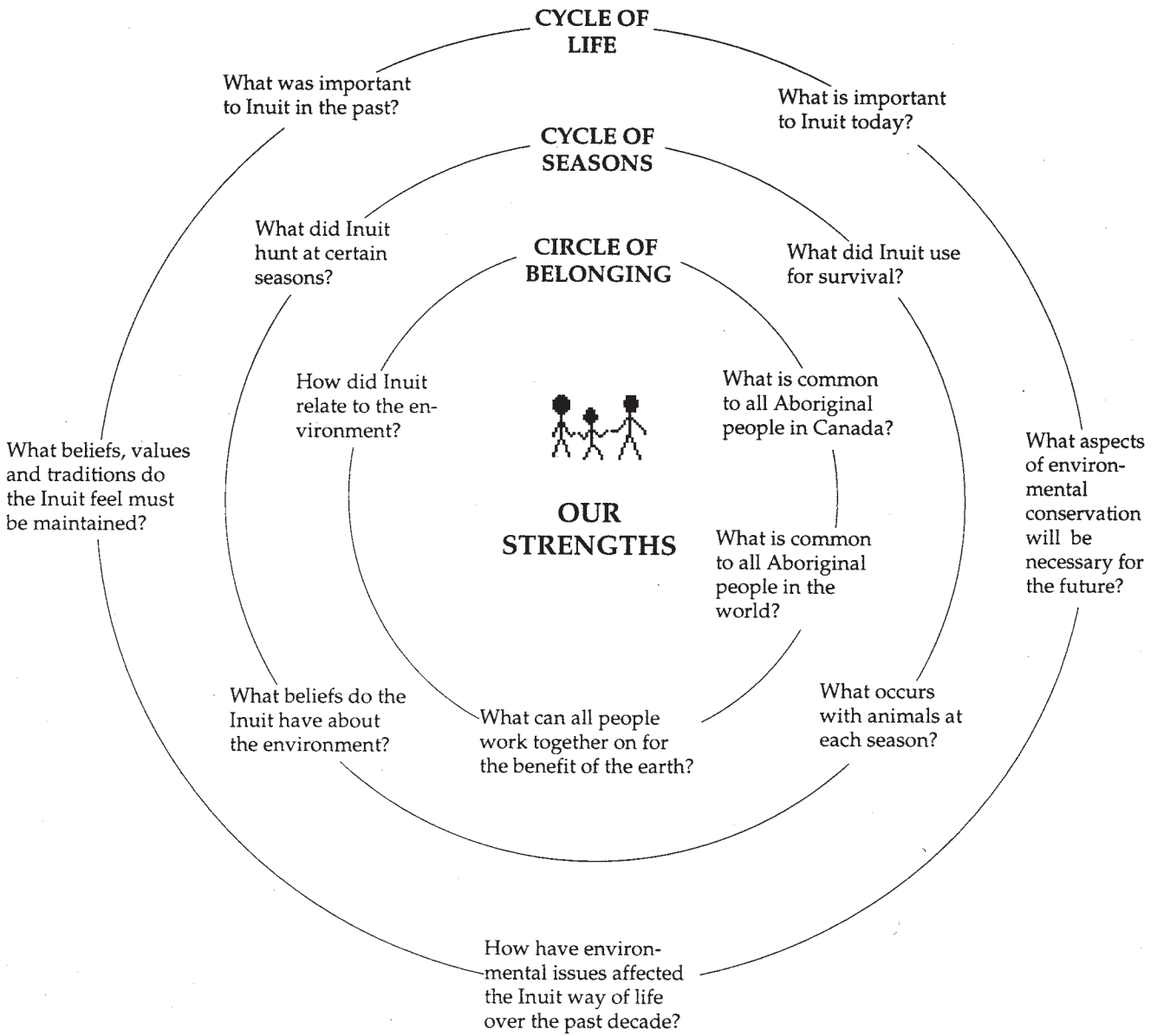
## Relationship to the Environment Table of Contents

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**RELATIONSHIP  
TO THE  
ENVIRONMENT**



## Introduction to Relationship to the Environment

*"It is very awesome when we think about this land"*

*(Inuit Land Use and Occupancy Project, [ILUOP] Vol. 2, p.255).*

*"The World consisted of nuna, the land, tariug, the sea and hila, all the space above. Moreover, nuna was the world itself stretching endlessly in all directions".*

*(Rasmussen referring to Copper Inuit, Coronation Gulf - ILUOP, vol. 2, p. 217).*

*"Winter, spring, summer and fall are all different. Just like the land itself. When the land changes the Inuit way of life changes together with the land that is changing".*

*(ILUOP vol. 2, p. 260)*

This section of the curriculum describes and explores the relationship of the Inuit to the natural world around them. The Inuit have always had a close relationship with their environment. They feel they belong to the land, as they have depended on it for survival and learned to adapt to its rhythms and cycles for centuries. To Inuit, "the land" includes all of nature: the earth itself as well as the water, the ice, the wind, the sky, the plants and animals. The land has given life to Inuit, but it can also be harsh and dangerous and can take life away.

Knowing the land is a tradition that is as much a part of life now as it was in the past. The objectives of this section of the curriculum are:

- to help students appreciate and understand the importance of "the land" to Inuit, in the past and today;
- to ensure that students learn the major understandings, values, and attitudes that will allow them to live with respect and skill in the harsh northern environment;
- to encourage students to explore the traditions, knowledge, and beliefs that have helped Inuit know and belong to the land through the cycles of seasons and years.

This section is divided into separate topics for practical reasons. However, when teaching this section, it is important to keep in mind that the Inuit believe all living things are connected in a continuous cycle of life, and cannot actually be separated. The topics are intended to be combined creatively, within the section and with topics in the "Relationship to Other People" section, as all are related. They are all part of the circle.

We encourage you to meet with your colleagues in your division to identify what parts of the topic or theme you will cover in your classroom so there will be less repetition for the students from one grade to the next. We encourage you to connect with Cycle of Life, Cycle of Seasons and Circle of Belonging with every topic or theme you cover. Under the Relationship to the Environment framework, there are some broad questions that can guide you while planning your topic.



## Land

*"Where I live, people would camp near the rivers where the caribou are known to cross. "*

Tulurialik



Photo: T. Macintosh

Stone tent rings, Rankin Inlet

*"...If we want to own the land, then we should live on the land..."*

I moved inland so that my own convictions would be carried out for Inuit and government alike. Although it is difficult to live inland at times, I live just as well as any person with an education or a steady job. When I moved to Kuuvik and set up an inland camp, I found a happier life than settlement living could offer. Living inland is very peaceful. It is also convenient - caribou, fish and my traps are close by. My children are learning a better way of living - the Inuit way of living."

Andy Mumgark  
Ajurnarmat, 1978  
ICI

## Land

**Rationale :** Inuit enjoy being on the land and are brought up to respect the land and be aware of distinctive landmarks. Elders say it is important for young people to be out on the land and to learn to read the land. They are concerned about possible tragedies that could happen because of a lack of survival skills. Elders and parents want the school to reflect this concern. This topic should emphasize landforms and landmarks for finding direction when travelling on the land, and survival skills. Even small children can be taught to be observant. This topic can lead to other topics such as land animals, fish, transportation, weather observation, camping, clothing, festivities and others, depending on what elders want the children to know at their age level.

### *Values*

- Respect for inuksuit and the purpose for which they were built should be taught.
- Always giving care to the land, knowing it is the provider is important.
- Causing harm to the land by being careless or thoughtless was discouraged.
- Appreciation for the many stories, old and new, about the land should continue.
- Showing respect by leaving a gift in certain areas was important to Inuit.

### *Beliefs*

- In some areas, Inuit believe that if a person pushes or knocks over an inuksuk on purpose, the person who made the inuksuk will die.
- The Inuit believe the earth produces eggs. If the earth's egg is broken or damaged, the earth will become very angry, weather will become very bad and deaths will be heard about from everywhere.
- The Inuit believed that if people stayed in one place too long, the land would get "hot", and then sickness, discontent, crime and social breakdown would occur.
- When you arrive at a place you have never been before, briefly walk backwards to ensure you will safely return to where you came from.

### *Major Understandings*

- The land is very important to the Inuit.
- The land can provide everything for survival.
- The land must be treated with respect.
- Knowing the land is a tradition that is as much a part of life now as it was in the past.
- Inuit did not have maps or compasses but knew which direction they were going.
- Maps and compasses have become useful and helpful in today's world.
- Rocks have always been important to Inuit in providing shelter, tools, utensils and as games.

### *Attitudes*

Students will be encouraged to:

- show respect for the land;
- become more observant about the land;
- take part in keeping the land safe;
- understand the importance of landforms or landmarks;
- appreciate how Inuit have learned to read the land to find their way;
- appreciate the beauty of their land;
- use their knowledge to indicate direction.



# Land

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

Grades K - 3

### *Objectives*

Students will:

- hear stories about hunting on the land;
- hear stories on ways of keeping the land clean;
- share their experiences about being on the land;
- share stories about going out on the land;
- learn the traditional names of landmarks or landforms around their community;
- identify ways to keep the land clean.

### *Knowledge and Traditions*

- The Inuit learned to live completely off the land; they found everything they needed to live on the land.
- Every type of land has a name.

### *Key Experiences/Activities*

- Have the students talk about going out on the land.
- Bring Elders, hunters or parents to talk about dangers that can occur on the land.
- Find out from your parents how they learned about what the land can provide.
- Visit landmarks or landforms close to their community.
- Make a class book on stories the students have written about going on the land.
- List or brainstorm everything the students know about the land.
- List or brainstorm everything the students would like to know about being on the land: use this information to tie in with another topic or as a guide to research for information on what the students would like to learn.
- Find out from the community what to do about keeping the land clean. Have the students think of ways to get personally involved.

Grades 4 - 6

### *Objectives*

Students will:

- learn the specific landmarks to indicate hunting areas, direction, fishing spots;
- learn the names of landforms around their community and why they have those names;
- hear stories associate with the landforms around their community;
- learn what can harm the land;
- be able to tell you the dangers that can occur on the land.

### *Knowledge and Traditions*

- Eskers can be helpful for direction.
- Raised beaches can indicate how the land has risen.
- The Inuit learned to live completely off the land; they found everything they needed to live on the land.
- There are inuksuit (plural for inuksuk), cache marks, tent areas and rock shelters that indicate where Inuit lived.

### *Key Experiences/Activities*

- If there are eskers in your area, find out from the local people which direction they go.
- Research from their family specific dangers that can occur on the land. Have the students also record preventative measures to take before going out on the land.
- Find out from Elders, hunters and others on what the land can provide.
- Have the students study what causes raised beaches. Record all local stories.
- Have the students research from Elders or from their family what was traditionally expected of them to know about the land at their age.
- Have the students tell you what they know about what can harm the land. Ask them what questions they might have about what can harm the land, then invite appropriate people to do presentations. Research on this topic can involve others teachers or use of a library, videos or films.

# Land

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- learn the names of landmarks or landforms around their area and why they have those names;
- understand why the land is important to the Inuit.

#### *Knowledge and Traditions*

- Pointers made of rock or wood were left for others to indicate which direction they went.
- The Inuit learned to live completely off the land; they found everything they needed to live on the land.
- Every type of land has a name and history.
- Inuksuit (plural for inuksuk), cache marks, tent areas and rock shelters are important indications there was good game, maybe a festival gathering spot, or an area to which families would travel.

#### *Key Experiences/Activities*

- Find out from Elders and hunters about other landmarks that give clues to people for direction, dangers and animal habitat.
- Find out from the community about dangers that can occur on the land.
- Travel by ski-doo, boat or truck and observe a variety of terrain and landmarks further from the community.
- Have the students use a map to identify local landmarks and landforms.
- Have the students go on a short trip. During this trip, have the students write in their journal how the land makes them feel, what they see and what they know. Have them imagine what their emotions would be if they had to survive on the land with just what they have at that moment.
- Have each student choose a landmark or landform and find out the name and why they have that name. Remind them that there is always history and stories behind each one.

### Grades 10 - 12

#### *Objectives*

Students will:

- develop a habit of telling someone where they will be hunting;
- learn the uses and dangers of the land;
- learn the traditional ways of respecting the land;
- learn to "read" the land, for direction and for signs of animals;
- learn what can harm the land.

#### *Knowledge and Traditions*

- Inuit learned to read the land, the sky, and the sea for guidance and direction
- The Inuit learned to live completely off the land; for food, shelter, tools, implements and clothing.
- Inuksuit indicated danger, direction, or migratory routes of animals.
- A small marker was placed near a lake to indicate where there was good fishing.
- Inuit could find which direction to go in even when there was fog or a blizzard by using the skills and knowledge that they learned from others.

#### *Key Experiences/Activities*

- Since inuksuit (plural for inuksuk) were made for certain reasons, find out from hunters why inuksuit are placed in your area, also talk about the changing image of inuksuit across the North today.
- Find out from hunters about dangers that can occur when travelling on the land.
- Learn from hunters every necessity that should be taken before going on a trip.
- While on a hunting trip, record, observe or note indications of animals in different terrains.
- Plan a route for a longer trip. This trip can provide an opportunity for students to lead, with guidance. During this trip, combine the traditional and modern way of finding direction. If the opportunity arises, look for signs of a good fishing lake, if there are no signs, perhaps your guide can show the students the traditional way of placing a marker next to a lake with fish.



## Water

*"Sometimes in the fall, the water is covered with melting snow that looks like ice. Fishermen should be aware of this."*

Joe Curley

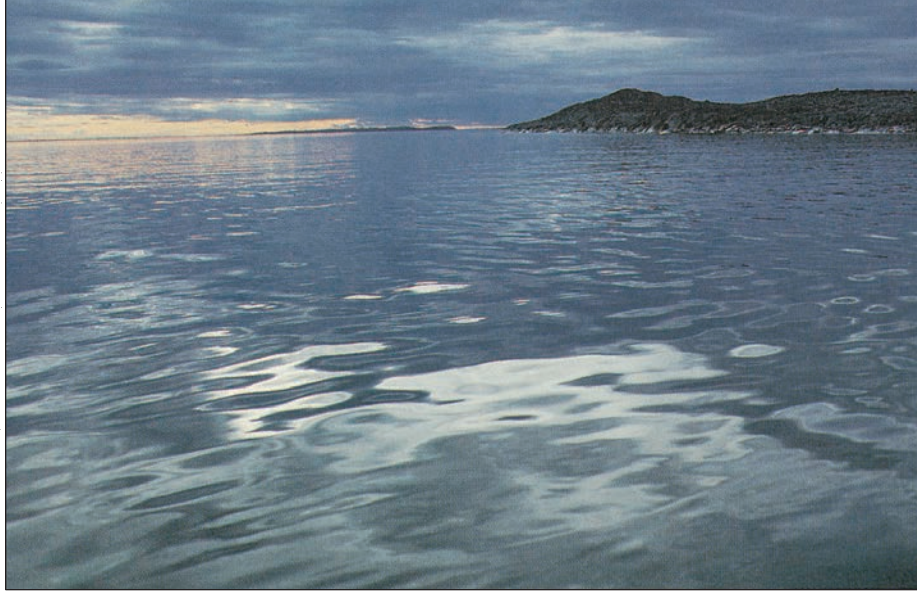


Photo: T. Macintosh

Rankin Inlet

"We travelled from Quviujajuk to Sandy Point by a small canoe. As we were getting ready to camp that night, the fog rolled in. We were out to sea, lost somewhere around Eemiligyuaq. The ones who were navigating had to shout to each other. My child, who never cried very much, started to fuss and Uvinik scolded him saying, "This child Markusie never cries, so why is he crying now. He must be frightened." I was frightened just as Markusie was. We were lost for three days waiting for the fog to lift but the water was calm for those three days. In our canoe were Qablunaguvik, Ungasaimna, Ungasaimna's father, Paulosie, and myself.

We drifted past Sandy Point and ran out of gas just as we were about to reach Sentry Island. We used a sail to make it to Sentry Island. While we were sailing, Uvinik said, "Since I have put my sister-in-law in danger, I want to keep going until we reach land." After three days at sea in the fog the sound of sand touching the canoe bottom sounded so nice. It sounded so nice, I started laughing, and soon the other were laughing as well. As soon as we got out of the boat we got the cup Tulugattuaq had brought and drank fresh water. We ran to a small lake but I was afraid of the bugs. I hated myself for thinking about bugs when I was so thirsty. I was so thirsty I drank three cups of water. When Uvinik saw me drinking from a cup he said, "Look, my sister-in-law is drinking from a cup." The others said, "Are you a white person? Are you ticklish?" They teased me because you were not supposed to drink from a cup just after you gave birth. My child had been born a couple of days before we left. I was very tired because I had only a couple of hours of sleep."

Helen Paungat  
Recollections of Helen  
Paungat, ICI

## Water

### *Rationale*

The rivers, the lakes and the sea are also givers of life. Water has always been important to Inuit for transportation and for providing food. Inuit have always camped near water. Animals from the water and sea are hunted for food, heat, shelter, clothing and for other uses. Plants, animals, wind and air need water, therefore, we must learn the ways of the animals and fish that depend on water. Wind create waves that can be dangerous, so one must learn to read clouds and know which ones bring wind. Water itself must be read, and know the currents that can cause accidents. The elders say that one must respect the power of water, and be cautious of its dangers.

### *Values*

- Appreciation of the importance of water to Inuit life should be taught.
- Inuit were encouraged to have gratitude to water for its gift of life.
- Respect for the power of water as a taker as well as giver of life was important.
- It is important to understand what lives in water.

### *Beliefs*

- If you throw sand in the air near water, it will cause rain.
- You must respect Takannaaluk (Nuliyuk, Sedna). She is the one that is the giver of sea animals. If you anger her, she has the power to take animals away.
- The water/sea is one of several spiritual domains in which the Inuit believe exist.

### *Major Understandings*

- Water has always been important to the Inuit for transportation and for food.
- Water has many uses.
- One must respect the power of water. Water can be dangerous.
- Water and its power must be respected.
- The Inuit have many different terms for water.
- Creeks, rivers, and the sea are all affected by high and low tides.
- All rivers run to the sea.
- Wherever there is a river, there will be a lake.
- There are different terms for water.
- Currents from lakes or the sea always change, depending on the season and depth of the water.

### *Attitudes*

Students will be encouraged to:

- understand the importance of water for all living things;
- appreciate how Inuit have learned to read the sea;
- give a gift to the sea after killing a sea animal;
- recognize the wisdom of camping close to water.

# Water

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives*

Students will:

- begin to recognize that water is an important part of Inuit life;
- learn how water was and is used by Inuit;
- begin to learn about the power of water and how it can be dangerous;
- begin to learn the difference between rivers, lakes and the sea.
- begin to understand that the same body of water can be safe or dangerous at different seasons.

#### *Knowledge and Traditions*

- River water is preferred over pond or small lake water for drinking .
- If water is muddy or full of bugs, a gauze can be used as a filter.
- Water will taste different at different lakes.
- The Inuit have many terms for water and its stages.

#### *Key Experiences/Activities*

- If possible, have them carry fresh river water to their grandparents or a member of their family.
- Go to the seashore, a pond or a river. Study movements of water, taste the water, take samples of water and small creatures, and watch for any colours they see in the water.
- Have the students hear stories about the power of water and about the way water conditions can change, making the water dangerous.
- Have students write and illustrate a story that tells about a time when their family camped and/or travelled by water. Have them point out the different uses of water on that trip[. Discuss the dangers they need to be aware of when camping by or travelling on water.
- Collect water from different places (e.g. a pond or small lake, bigger lake, river, sea). Drink some water from each place and compare the tastes. Use a gauze to filter some of the water.

### Grades 4 - 6

#### *Objectives*

Students will:

- learn how the bodies of water around your community can be dangerous, and the precautions necessary to ensure safety near water. Appreciate the power of water.
- learn that water in rivers, lakes and the sea changes under different seasons. Begin to learn Inuit terms for water under different conditions.
- learn how plants depend on water. Discover plants that live in or near water.
- learn some traditional Inuit beliefs about water.

#### *Knowledge and Traditions*

- People cooked meat with sea water for flavouring.
- The Inuit have many different terms for water and its stages.
- The Inuit know where fish spawn.

#### *Key Experiences/Activities*

- Learn some traditional Inuit beliefs about water (see previous page). Discuss the reasons for these beliefs; how they have or not have changed over time; and how they might be relevant to students' lives today.
- Visit several bodies of water close to your community indifferent weather conditions and seasons. Notice the water conditions. Notice the weather. How do these affect the water? Discuss important safety precautions around water, and being aware of changing conditions.
- Collect fresh and sea water and freeze them. Monitor the time it takes for them to freeze. Discuss the importance of this knowledge for safe travel on water.
- Listen to some traditional stories and information about water, if possible, record the stories and information.
- Talk about traditional beliefs attached to the topic, or the story or stories they have heard.



# Water

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

Grades 7 - 9

### *Objectives*

Students will:

- understand the relationship between water, weather, and seasons;
- learn when high and low tides occur and appreciate the power of tides;
- learn about currents and channels and lakes, rivers and sea;
- learn about plants and animals that live in water.

### *Knowledge and Traditions:*

- Boys were encouraged not to drink too much water at once, this was to ensure that they learned how to handle thirst.
- Eating snow makes you thirstier; slowly melt the snow in your mouth before swallowing.
- Currents in lakes or the sea are always changing.
- The tide is highest during the full moon.
- People cooked meat with sea water for flavouring.

### *Key Experiences/Activities*

- For a week, have students measure and record the amount of water they drink each day. Then have them try drinking less than normal each day for a week. What happens?
- Ask an elder to talk about all aspects of currents and channels in water near your community. Find out how a person learns to “read” the water, and how to be aware of changing currents and channels. Have students map the areas described by the elder.
- Go camping for several days near water. Keep track of the weather and water conditions, and notice any relationships between them. Discuss the dangers of camping near water and safety precautions. Observe what lives in and near the body of water; look at plants, look at water under a microscope. Keep records of all the plants and animals that students observe and how they are “using” the water. Have students keep track of how much water the class uses and the different ways it is used.

Grades 10 - 12

### *Objectives*

Students will:

- learn how to travel safely on water;
- learn how to tell when it is safe to travel by sea;
- learn about areas of water that never freeze in lakes, rivers, and/or the sea near your community;
- learn what can harm water and how to prevent it.

### *Knowledge and Traditions:*

- Boys were encouraged not to drink too much water at once. This was to ensure they learned how to handle thirst.
- Waves are choppy at shallow places.
- The Inuit know where some areas in lakes or the sea never freeze.
- Some lakes have more fish than others and some lakes have edible plants.
- The Inuit have many terms for water.
- The Inuit travelled to reach their destination at high tide.

### *Key Experiences/Activities*

- Find different uses for waterfalls. Record stories about waterfalls around your region.
- Bring an elder to talk about all aspects of currents and channels. The students can map these areas.
- Find out lakes with fish and edible plants.
- Travel by water. During this trip, go to a large lake and/or the sea. Observe the clouds in the sky, check the water to see if there are currents, observe plants that live in and around the water. Observe any animals they see. Talk about the best way to travel by the water. If you have an elder or hunter with you, ask them to tell personal stories about travelling in that particular area. When around the elder or hunter, watch to see how they observe their surroundings.
- Have a class discussion on what can harm water. Ask them to write in their journal on how they can get personally involved in keeping water clean.

## Ice

*"The ice on lakes can be dangerous too. If cracks are visible in the ice, it is generally safe to walk on unless there is water on top of it."*

Joan Atuat



Photo: G. Calef

Changing Forms

"Sea ice and lake ice behave differently. When preparing for a trip on sea ice, it pays to watch the sky. If it is clear, sea ice will freeze solid and it will be safe to walk on. If it is cloudy, it is dangerous to walk on sea ice. Lake ice is dangerous only when it's thin, and often a layer of snow covers it making it difficult to see whether it is dangerous or not. A person must be careful.

Sometimes in the fall, the water is covered with melting snow that looks like ice. Fishermen should be aware of this. When the wind starts to blow, the open water becomes exposed and you can tell where the ice ends. When the weather is warm, the sea ice can become quite rubbery and unsafe. Hunters should also be aware of the tides when they are on sea ice; sometimes tides are strong and can move the ice. When the wind blows from the southeast, a hunter knows that the ice will be safe in three days. Then he can go out seal hunting. Blowing snow makes hunting very dangerous, however, as seal holes and open water can be covered with the snow and difficult to see. Walking on the ice at night also is dangerous.

Walrus often lie on very thin ice and a hunter should check the ice before going after one. It is best if the hunter takes his harpoon when stalking a walrus, as it can be used to test the ice. Sometimes a hunter will become so engrossed in catching an animal that he forgets to watch the ice. A hunter should always be aware of ice conditions. If possible, always take a small boat when hunting on the ice. Often walrus and square-flipper seals are far from shore in the deep water. The ice there could be moving, and one could easily drown."

Joe Curley  
Elders Conference, ICI

## Ice

### *Rationale*

Ice is important to many aspects of life; for humans, animals and plants. Since most of the year the sea, lakes and rivers are covered with ice, it is important that students start early in their life to learn about the dangers of ice. Inuit have learned when ice is safe to travel on and when it is not. People have passed on their knowledge gained from experience or learning it from someone else. Stories about tragedies and near mishaps are used as cautionary forms of teaching. Learn from them. Advice from the elders about ice must always be taken seriously.

### *Values*

- Respect for ice and its importance to the life of Inuit was important.
- Appreciation of the importance of ice in the cycle of life: for humans, animals and all other living things should be encouraged.
- It was important to learn the ways of ice for safe travel and safety.
- It was important while travelling on ice to follow someone who knew what they were doing.

### *Beliefs*

- The qallupilluk (troll) lives under the sea. In the spring time, you can hear him thump the ice and make it crack. It will take children and put them on its back to take them underwater to adopt them.
- If you sew caribou clothing while you are on sea ice, it will drive the water animals away.
- When a man is travelling on dangerous ice, a woman was to keep her floor very clean. She also kept the doorway clear and closed the door properly at night. In the morning, she would get up and go outside immediately for a few minutes. These actions would ensure her husband's safety on the sea ice and his safe return.

### *Major Understandings*

- Ice can be dangerous depending on the season.
- Sea ice and fresh water ice freeze, melt, and break up differently.
- The colour of new ice on lakes, rivers and the sea will be different than older ice.
- The Inuit have many uses for ice.
- Through experience, Inuit have acquired much knowledge about sea ice, which can be learned from elders, through hunting stories and by observation.
- Hunting at the floe edge can be dangerous if you do not know what to do.

### *Attitudes*

Students will be encouraged to:

- Appreciate how much people have learned over the years about sea ice either from experience, from an elder or through hunting stories.
- Appreciate the willingness of people who wish to share their knowledge.
- Be careful and cautious while travelling on ice.



## Ice

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades K - 3

##### *Objectives*

Students will:

- begin to learn that ice can be dangerous;
- learn where the cracks are that form every year around their community;
- hear stories about the dangers of ice;
- appreciate that elders and hunters have much knowledge about ice, gained from years of experience.

##### *Knowledge and Traditions*

- Fresh water ice breaks into candle ice and is more dangerous than salt water ice.
- Fresh water and sea ice both crack.
- Fresh water ice is preferred for drinking.

##### *Key Experiences/Activities:*

- Invite an elder or knowledgeable person to tell stories that caution students about the dangers of ice.
- Have students draw a picture of one of the stories.
- Go for a walk and observe ice near the community; ask an elder to show the class where the cracks are.
- Collect and melt fresh water ice and sea ice. Have students drink some water from each. Which tastes better?

#### Grades 4 - 6

##### *Objectives*

Students will:

- learn how ice changes with the seasons and when it can be dangerous;
- learn the difference between fresh water ice and salt water ice;
- become familiar with places near the community where ice can be especially dangerous;
- learn how to chop ice at a crack and other techniques for getting drinking water from ice;
- learn the ways Inuit use ice;
- explore Inuit beliefs about ice.

##### *Knowledge and Traditions*

- Fresh water freezes faster than salt water.
- Fresh water ice breaks into candle ice and is more dangerous than salt water ice.
- Sea ice melts from the bottom first and fresh water ice melts first from the edges.
- There is a certain technique for chopping ice at a crack.

##### *Key Experiences/Activities:*

- Invite an elder or knowledgeable person to talk about the dangers of ice at different times of the year.
- Observe ice near the community during different times of the year, and have students record the changes they observe. If there is both fresh water and salt water nearby, observe both and compare them.
- Find out from an elder if there are places near the community where the ice is known to be especially dangerous.
- Take the students out to a lake to learn the technique for chopping ice at a crack. Deliver the ice to elders in your community.
- Have students ask their families how they use ice, or how it was used in the past, and share the information in class.

# Ice

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- learn to read the ice and tell if it is safe or dangerous;
- learn the various ways ice freezes, breaks up, and melts;
- begin to learn how to travel safely on the ice
- appreciate the value of the knowledge and wisdom about ice that elders and hunters have acquired from experience;
- understand the role of ice in the seasonal cycle of life of plants and animals and its affect on the lifestyle of the Inuit.

#### *Knowledge and Traditions*

- Sea ice melts from the bottom first and fresh water ice melts first from the edges.
- Fresh water ice breaks through from the top to the bottom.
- The salt from rough ice will eventually drain and become fresh if it is not submerged in sea water.
- Newly formed sea water ice will be elastic, fresh water will be brittle.
- Ice will be thinner at pressure ridges and where there is a lot of snow.

#### *Key Experiences/Activities:*

- Invite an elder or knowledgeable person to talk about Inuit beliefs about ice.
- Ask an elder to share his knowledge about reading the ice. How does he tell when ice is safe for travel?
- Observe salt water and fresh water ice (if possible) during freeze-up and break-up. Notice the differences. How long does each take to freeze, melt, break up? Do they follow a "pattern"? Is it the same every year?
- Plan and go on a trip across ice with experienced hunters. Learn the precautions they take and how they travel safely.
- Discuss the ways ice affects the Inuit lifestyle, such as travel, animals hunted, etc. Are there community celebrations that focus around ice?
- As a class, go and get ice. Deliver the ice to elders in your community.

### Grades 10 - 12

#### *Objectives*

Students will:

- refine their skills in reading the ice;
- understand the relationships between ice, weather, tides, currents, and the land;
- continue learning when, where, and how, to travel safely on the ice;
- learn how to hunt safely at the floe edge;
- learn what to do for survival on breakaway ice;
- travel with elders and hunters to learn from their experiences.

#### *Knowledge and Traditions:*

- Tides have an effect on ice.
- Sea ice breaks into chunks.
- Sea ice melts from the bottom first and fresh water ice melts first from the edges.
- Fresh water ice breaks through from the top to the bottom.
- Newly frozen sea ice is more elastic than fresh water new ice.
- Hunters travelling on new ice will always stop and check if they are travelling on the same kind of ice.

#### *Key Experiences/Activities*

- Invite an elder or knowledgeable person to talk about hunting at the floe edge.
- Take a trip across ice, to the floe edge if possible, with elders or other experienced hunters.
- By observing or listening to experienced hunters, collect information on hunting safely at the floe edge. Present the information in a way that can be shared with others, such as a video or booklet.
- Find out how the floe edge is formed, and how it is affected by weather and tides. Why is it a good place to hunt?
- Research from your community or another community on what to do if the situation ever arises where you are caught on breakaway ice. The experienced hunters will be able to tell you the direction the ice would go depending on where it happened and the currents.

## Sky

*"Once in a while, there is a ring around the sun even on a clear sky. The same applies to the moon, you might see a ring around it even in perfectly clear sky ... it is a sign of approaching overcast."*

Barnabus Pirjuaq



Photo: T. Macintosh

Sunset, Repulse Bay

"Greater percentage of winter consists of clear sky and when you go out, you'll see the stars appear to be moving about as you look up. When you look at a flame out doors, you'll notice that it flickers rapidly from the wind. When the stars behave like this, our ancestors had a saying like this, "The storm is brewing as the stars are flickering."

Sometimes the stars are very still at the approach of calm weather. Our ancestors were quite accurate in weather predicting just by the sight of the sun, moon, stars or ring around the sun or the moon. Ring around the sun or moon generally brings an overcast. If the stars appear to be flickering very rapidly, shine unusually brighter, appear to be closer than usual or have the look of flickering in the wind, it is a sign of an approaching snow storm."

Barbabus Pirjuaq  
Isumasi magazine, ICI



# Sky

## ***Rationale***

Traditionally, the Inuit looked to the sky not only to predict weather, but also to find their direction. The sky was studied continuously and talked about. The knowledge was passed on from one generation to the next. Since the north will always be severely cold and people will continue to go out on the land, the elders feel it is important that the younger generation learn to study the sky to predict weather. They feel the school is a good place to ensure that all students benefit from the knowledge of the elders on this important topic.

## ***Values***

- Respect and appreciation for Inuit beliefs about the sky is passed on from one generation to the next.
- Acceptance of the weather and sky as part of life was encouraged.
- The Inuit have traditional stories about the sky.
- The people who had knowledge of the sky were highly appreciated.
- The sky gives information: one only needs to learn to be able to understand the information.

## ***Beliefs***

- If you whistle at northern lights, they will come down, take your head and play ball with it. Rub your fingernails together to drive them away.
- When the moon is slanted, it means it is carrying animals for families to hunt.
- Never stare at the full moon or the moon man will shoot arrows at you.
- When the northern lights are very close, the dogs will not hear any command. Shake a piece of pukiq in front of the dog team to drive away the northern lights.
- The elders say the northern lights are the spirits of our ancestors.
- When you bang two white rocks together, it will cause thunder and lightning.
- Inuit believe they were the first to travel to the moon.

## ***Major Understanding***

- The return of the sun in January begins a new life.
- Inuit gathered, feasted, danced, and played games when the sun disappeared until the sun returned.
- Stars are used for telling direction.
- The sun rises in the east and sets in the west.
- The North star is used for finding direction, as are the dawn, and the position of the sun, the moon and other stars.

## ***Attitudes***

Students will be encouraged to:

- look at the sky and always be conscious of the changing weather;
- learn from the elders how to read the sky to predict weather.

# Sky

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives:*

Students will:

- appreciate the importance of the sun as a giver of light, warmth and life;
- hear stories about the sky and its importance in the life of Inuit;
- learn where the sun rises and sets;
- begin making a habit of looking at the sky often.
- begin to notice changes in the sky;
- learn the names of the sun, moon, and stars;
- begin to appreciate how the Inuit lifestyle was tied to nature's rhythms and cycles of light and darkness rather than to clocks.

#### *Knowledge and Traditions*

- Falling stars have a certain name that implies they have droppings (anaqtut).
- When stars are twinkling, it will be clear and cold.

#### *Key Experiences/Activities*

- Learn the Inuit names of the sun, moon, stars.
- Observe the sky often in class. Draw or write stories about what students see in the sky.
- Do a class wall mural of the sky. Show where the sun rises and sets at different times of year.
- Have your class survey older students on whether they have stories or knowledge to share about the sky. After collating the survey results, make a list of the students who have stories and then plan how your class will collect the stories.
- If it can be worked out logistically and with the support of the school and parents, try going through a week with no clocks in the class. Let natural rhythms determine the daily activities, e.g. when to work, rest, play, eat. How can you tell time without clocks? How important is it to know the exact time? Notice changes through the week. Talk about the experience every day.
- Do a skit that shows people appreciating the sun's gifts.

### Grades 4 - 6

#### *Objectives*

Students will:

- discuss beliefs about the sky;
- learn to observe the sky often and be aware of changes;
- understand what can be learned by looking at the sky;
- become familiar with the night sky and understand that the moon and stars change positions;
- begin learning how Inuit read the sky to tell direction;
- learn how Inuit told time before clocks.

#### *Knowledge and Traditions*

- Tukturjuuk, tukturjuit, aagjuk, uglaqturjuit (stars) are studied to know when dawn is approaching.
- When there seems to be a halo around the moon, bad weather is expected.
- When there is a full moon during the day, there is going to be major tide.

#### *Key Experiences/Activities*

- Go on an overnight camping trip. Have the students observe and talk with each other about what they see, as the day changes. Take advantage of this setting to tell stories about the sky or even read stories.
- Invite an elder or knowledgeable person to tell stories about the sky or talk about traditional beliefs. Record while the person is talking. If possible, provide the person with pictures or photographs and class questions as a guide. Later, have the students publish a "newspaper" to share with their families and other classes.
- Ask students to observe and talk about the night sky with their families. Have them write and illustrate a book of the family's knowledge and stories and share it in class.
- Make a list of all the things you can learn by "reading" the sky. Have a celebration to thank the sky for each of its gifts.

# Sky

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- learn how to tell time using the sun and shadows;
- develop their skills in telling direction from the sky;
- understand the seasonal cycles of the sun, moon and stars and learn the names for their different positions;
- learn the Inuit names for constellations;
- become familiar with travelling in the dark;
- appreciate the elders' knowledge of the sky.

#### *Knowledge and Traditions*

- Northern lights indicate that bad weather is expected the next day.
- Ajaraaq (string game) was forbidden during the day, only when the sun went down.
- The North star is used for direction.

#### *Key Experiences/Activities*

- Have your students learn the terms for sun and moon positions.
- Do a class research project to learn about the cycles and positions of the moon and stars as they move through the sky. Find out how Inuit traditionally told the time from the positions of the stars. Make a "star clock".
- Using a pole or a large rock on the school grounds, observe and draw the size and position of its shadow throughout the day on sunny days over the course of several months. Discuss how shadows can be used to tell time on the land.
- Make a wall or ceiling mural of Inuit constellations and learn the names and any stories that go along with them. Find out from elders whether constellations can be used to tell direction when travelling in the dark.

### Grades 10 - 12

#### *Objectives*

Students will:

- refine their skills at observing and reading the sky;
- become comfortable with finding their way travelling in the dark;
- become familiar with Inuit beliefs and stories about the northern lights;
- learn about traditional Inuit calendars and their relationship to the seasons, the sun, and the moon.

#### *Knowledge and Traditions*

- When there is a full moon during the day, there is going to be a major tide.
- At the beginning of the full moon, there will be high tide.
- In the dark of winter, people hunted by the light of the full moon.
- When the moon is very bright it means there will be hunger because the animals can see you.

#### *Key Experiences/Activities*

- Take a class trip in the dark. Practice telling direction and finding your way by looking at the sky.
- Take the class for a trip where they can travel during the full moon. Tell stories about the moon.
- Interview elders on when the northern lights would appear and how they felt about them. Have the students write about their own experiences with Northern Lights. How did they feel about them?
- Have the class collect examples of traditional Inuit calendars from different areas. How do they mark the passage of time? How do they relate to the sky, the land? What interval of time do they use? What do calendars from different areas have in common? How are they different? What do they tell about traditional Inuit lifestyle? Have students write stories about people living by a traditional calendar.

## Weather and Weather Predicting

*"Unless everything that make up for bad weather is completely cleared up during winter, there is always that possibility of foul weather."*

Barnabus Pirjuaq



Photo: T. Macintosh

Storm clouds over Koolooktoo Bay

"My wife still notices when I suddenly, without much thought, comment on weather condition. I often do this still, though I may have no plans whatsoever to go hunting. Strictly by habit I would make certain remarks about the weather. Just yesterday, the weather was completely calm by night fall. When I arrived home, my wife was already home before me. In the calm of night, without even looking around when I suddenly thought of making a trip, I said to her as I walked in, "Oh, there's a storm coming." "Why, is it not clear?" "No, but that sudden cold spell tells me that storm is very near." I said to her.

During the peak of winter this is one way of telling what to expect of weather without even taking a glance. A person learns to watch the spell of cold or mild weather."

Barnabus Pirjuaq  
Isumasi magazine, ICI



## Weather and Weather Predicting

### *Rationale*

Weather is something that humans cannot control. The land will always have winter, cold and storms, so children have to be prepared to cope with the weather. The Inuit have learned to read nature to predict the weather. The elders and parents feel that weather predicting should start early and be done on a daily basis. Children can be taught to observe the clouds, notice the wind direction and strength of the wind, and identify the different types of cold. This topic should focus on the elders' traditional knowledge of weather patterns, changes and terms as well as on modern weather forecasting techniques.

### *Values*

- Learning patience with the weather is important.
- Recognition that weather controls humans and that humans do not control weather is encouraged.
- The ability of people who knew how to predict the weather was highly valued.
- Adapting to the cold was considered important for survival.

### *Beliefs*

- Inuit believe when certain things are done by people, or when something happens to people, it can have an affect on weather.
- Nature mourns or is affected by death, which takes the form of bad weather or change in weather.
- If you twirl seaweed, it will create wind.
- If you burn bird feathers, it will cause a storm.
- If you kill a spider, it will rain or become foggy.
- If caribou skins are tanned during the summer, it creates thunder and lightning.
- If someone takes belongings from a traditional burial area, the weather will turn violent.
- When the moon seems to be laying back, it means bad weather is approaching.

### *Major Understandings*

- The land will always have winter, cold and storms, therefore we have to prepare children to cope with the weather.
- Weather predicting should start at an early age and be done every day and every night.
- The sun, clouds, moon, stars, rainbows and northern lights can be used to predict weather.
- Waves on water can be used to predict weather.
- The lifestyle of the Inuit was controlled by weather.

### *Attitudes*

Students will be encouraged to:

- develop a respect for unpredictable weather;
- develop a respect for the elders and others who have learned to read weather signs;
- understand why elders may harshly question them about their knowledge of the weather;
- develop the habit of reading weather signs;
- develop the habit of examining the weather first thing in the morning.

# Weather and Weather Predicting

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives*

Students will:

- develop a habit of looking at the clouds and feeling the wind whenever they are outside.
- hear stories about weather and how Inuit coped with it.
- begin to appreciate how weather affects lifestyle.
- learn to respect the weather.
- understand that the weather cannot be controlled.

#### *Knowledge and Traditions:*

- Weather will never be loving or compassionate to anyone.
- A blind man uses wind for guidance by feeling which way the wind is blowing. A blind man will learn to know which is the prevailing wind and use it to guide his way.

#### *Key Experiences/Activities:*

- Invite an elder to talk about the importance of weather predicting. Record stories the elder tells.
- Start your day off by having the children describe the weather. Where is the wind coming from? Where do you feel it from? What is the name of the direction? Is it cloudy? Describe the clouds. End the day with an analysis of the day; did the wind change? Is it colder? warmer? How do you think the weather will be tomorrow?
- Have the parents write a story with their children about being caught in a storm while camping or fishing. The children can bring the stories in and share them, or, have the parents come in to tell their story. Serve tea and have an informal gathering. Encourage the parents to share further stories they experienced or have heard about.
- Collect stories of unpredictable events that happened because of weather.
- Draw pictures of the weather or act it out.

### Grades 4 - 6

#### *Objectives*

Students will:

- begin to develop a habit of frequently observing the weather and noting changes.
- explore beliefs about weather and how they helped Inuit cope with the weather.
- begin to learn traditional ways of predicting weather using the sun, moon, stars, etc.
- learn about clouds from both the traditional Inuit and modern scientific perspectives.
- learn they must never get angry at the weather.
- begin to notice patterns in the weather.

#### *Knowledge and Traditions:*

- Weather will never be loving or compassionate to anyone.
- Weather predicting is a skill that is learned over time.
- When the sky seems to have four rainbows, then it's time to lock everything up because it will get extremely windy.

#### *Key Experiences/Activities:*

- Have the students write stories about being caught in a storm or being caught on the land by high winds. What did their families do during the storm?
- As a class observe the weather several times each day and keep records of the wind direction and speed, clouds, sun, rain or snow, temperature. Do this over a period of time. Start out without using instruments, using only the senses to describe the weather. After some time, see if you can notice patterns, and try to predict the next day's weather.
- Invite an elder to talk about traditional ways of predicting weather.
- Visit the weather station in your community, if there is one. Record or interview the person. After the visit, have the students tell you what they learned. Write down any questions and visit the station again to ask them.
- Make a mural of clouds and name them.

# Weather and Weather Predicting

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- appreciate the importance of accurately predicting weather.
- learn what to observe and watch for in order to predict weather.
- learn how weather affects animals and how this affects Inuit lifestyle, today and in the past.
- appreciate how weather affects travel.
- learn to use weather instruments.
- become more skillful at predicting the weather using traditional and modern approaches.

#### *Knowledge and Traditions:*

- Weather will never be loving or compassionate to anyone.
- The Inuit have learned to read clouds to predict weather (refer to “clouds and their meaning” on first page of this section).
- On a clear day, when land in the distance appears higher than usual and is upright, then wind should be expected. When the land and everything else look small, then good weather is expected.
- When four rainbows appear at once it means bad weather.

#### *Key Experiences/Activities:*

- Invite an elder to talk about the importance of weather predicting and traditional ways of predicting weather. Discuss what can happen if you don't pay attention to the weather or if you don't predict the weather accurately.
- Learn to make simple weather instruments.
- Invite someone from Department of Transport or the airport to talk about keeping weather records.
- Research then discuss how the weather might affect different kinds of animals (think about migration). Find out if some people can predict weather by watching animal behaviour.
- Divide the class into several groups. Ask each to predict the next day's weather using different methods. As a class, record the actual weather of the day and evaluate the accuracy of the different predictions. Do this for a period of time.

### Grades 10 - 12

#### *Objectives*

Students will:

- appreciate how the weather affects their activities and their moods on a day-to-day basis.
- become more skillful at predicting the weather by reading the sky and the land.
- learn about modern weather forecasting.
- develop respect for sudden changes in the weather.
- learn the dangers of weather and how to take precautions for them.
- learn about long-term climate changes.

#### *Knowledge and Traditions:*

- There are many months of poor weather, but April and July have the best weather.
- Hunters had to be able to predict weather.
- On a clear day, if it becomes stormy from the north, the wind will not blow long.
- Do not travel in the summer when the water is rough if there is fog above the water. Once the fog clears up, it is possible to travel even if the water still looks rough.
- Long, black shiny clouds are a sign that there will be snow or a storm the next day.

#### *Key Experiences/Activities:*

- Have students keep individual records of “weather signs”, e.g. wind direction and intensity; how the distant land appears; the shape, height, and speed of clouds; the presence of halos or rainbows around the sun and moon etc. Have them make predictions based on their observations, then evaluate their accuracy. Compare and discuss students' observations.
- Observe ripples and waves close to the shore and further out on a body of water. Draw them on windy, stormy, sunny, and cloudy days and notice the difference. Can you show it on a graph?
- Have students keep a “weather journal” that describes the weather, if their activities were affected by the weather, and their feelings about it. Pay attention to patterns.
- Research modern weather forecasting methods and discuss their advantages and disadvantages.
- Find out how to treat frostbite, hypothermia.

## Caribou

*"I noticed that when Inuit were preparing caribou carcasses for caching they would leave the the hooves and the muscles intact when they cut off the legs so they could use use the leg muscles for pulling the frozen meat out."*

Mark Kalluak



Photo: B. Decker

Barrenland caribou herd

"When Inuit spent the winter inland they would start to leave the coast towards the beginning of September. The weather is usually cooler by this time, the warble flies are gone and therefore the meat is free of warble fly larva. Caribou skins are at their best, too, as the hair is neither too thick nor too thin; they are at a perfect stage for making clothing and the skin texture is free of blemishes. Caribou at this time are in every way good for clothing and food, and because they are fat the meat is suitable for caching. During nomadic times when men hunted on foot, they would sometimes leave their coastal permanent camps for a few days to hunt caribou in order to get skins for clothing and to cache the meat.

The men who hunted caribou specifically to cache meat would select an area where there were rocks suitable for building the cache. There were several ways of caching meat. For example, after the caribou was skinned, one way was to leave the guts intact, although the head and legs were removed from the carcass. This kind of meat cache was called a "whole" because the main part of the carcass was not cut up much. One had to puncture the belly with a knife to let all the air out.

When the caribou was skinned, the hunter selected a suitable place and removed the bigger stones from the surface to form a hollow in which to place the meat. It was even better if at the bottom of the hollow, where the meat would be resting, there were all medium-sized stones, to allow plenty of space for air to circulate once the meat was covered with stones.

The hunters also had a way of making the cached meat to get at during the winter months when everything is frozen solid to the ground. The technique told to me was this: Before laying the meat in a hollowed-out spot, place a flat stone directly under the chest of the carcass. This was so the meat would be easier to pry loose when it was pulled from its place."

Mark Kalluak  
Isumasi magazine, ICI



## Caribou

### *Rationale*

The caribou has always been important to the Inuit. It provided food, shelter, clothing, tools, implements, and games. Clothing made from caribou skins is the warmest for northern winters. Many hunting stories were told at camps about caribou. Hunting caribou is still very important to the Inuit. This topic should focus on the importance of hunting caribou in your community or region.

### *Values*

- Respect for caribou and their migration routes are encouraged by elders.
- There are special ties between animals, especially caribou and the Inuit.
- Sharing the catch with school/community, and especially with elders is important.
- Appreciation for the many uses of caribou is to be encouraged.
- Pride in taking proper care of the caribou: cutting, cooking, sewing, serving was always important.
- The caribou have been the major source of food, clothing, shelter, tools and equipment for the Inuit over many generations.
- There were certain caribou parts that were eaten only by certain people.

### *Beliefs*

- Do not bring (the meat of ) water animals when hunting land animals. It will make the land animals angry and hard to find.
- If a woman accidentally eats caribou hair, she will get pregnant.

### *Major Understandings*

- The caribou goes through different stages of development.
- At certain times of year the caribou's skin will be better than the meat and vice versa.
- Hunting techniques were perfected for the caribou.
- Caribou are a major part of the food chain in the North.
- There are different herds of caribou.
- Changes in nature affect caribou.
- There are proper ways to prepare and preserve caribou.
- Over the years, the Inuit have gathered much knowledge about caribou. They know the places to hunt them, their habits, behaviors, sounds, actions, diet, calving grounds, migration routes, their predators and how to conserve them.

### *Attitudes*

Students will be encouraged to:

- respect the land by always cleaning up the butchering area;
- take pride in their first kill;
- share caribou meat and skins with others;
- share caribou meat that is cooked or prepared with elders;
- give elders something that is sewn using caribou skin.

# Caribou

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives*

Students will:

- appreciate the special importance of caribou as a major source of food, shelter, clothing, tools, and equipment for the Inuit through many generations.
- hear stories and songs about caribou.
- begin to learn traditional uses for various parts of the caribou.
- learn where and when caribou can be found near the community.
- respect and appreciate the gifts of the caribou.
- learn the importance of sharing caribou.

#### *Knowledge and Traditions*

- The first kill of a child is always shared.
- The Inuit used the meat, hide, bones and sinew.
- There are traditional songs and stories about the caribou.

#### *Key Experiences/Activities:*

- Provide pictures or if possible, the real thing, and have your students name all the caribou organs and their uses. You could have the class bring in samples, or you could make an announcement over the radio station asking for caribou parts or you may send a note home with the students.
- Have your students make a game or tool from caribou antler and/or bone.
- Have your students practice making caribou tracks with their hands in sand, mud or snow.
- Invite an elder and have the students learn caribou string games.
- Have your students learn the expectations of each person on a caribou hunt.
- Have your students identify things made from different parts of caribou (Arts and Crafts Store) or make a display of different items.
- Have your students hear stories about caribou and caribou hunting.

### Grades 4 - 6

#### *Objectives*

Students will:

- discuss beliefs about caribou.
- learn about the diet, habitat, behaviour, seasonal cycles and migration routes of caribou.
- continue learning about the many uses of caribou.
- begin learning how to properly prepare, preserve, and work with caribou meat and skin.
- begin learning traditional and modern hunting techniques for caribou.
- learn the proper way to show respect to caribou for its gifts.

#### *Knowledge and Traditions*

- The first kill of a child is always shared.
- The Inuit used the meat, hide, bones, and sinew.
- There are traditional songs and stories about the caribou.
- Inuit used caches for later use.
- The Inuit follow the tracks and trails of the caribou.

#### *Key Experiences/Activities:*

- Have your students prepare caribou sinew for sewing.
- Have your students name all the caribou organs and their uses.
- Have your students prepare caribou skins for sewing.
- Have your students sew caribou hide. This can be done with a seamstress.
- Have your students learn caribou stalking techniques.
- Have your students make recipes: akutuq, making lard from different fats and marrow.
- Have your students learn more complicated caribou string games.
- Have your students hear stories about caribou and caribou hunting and then they can write their own. Start a class caribou story book.

# Caribou

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

Grades 7 - 9

### *Objectives*

Students will:

- learn and practice traditional and modern hunting techniques during different seasons.
- learn when a caribou's skin is best and when the meat is best.
- be able to skin and butcher a caribou.
- understand the food chain the caribou is part of.
- continue working with caribou skin and other parts for various uses.
- appreciate how caribou are adapted to the north.
- learn the stages of development of a caribou.

### *Knowledge and Traditions*

- The Inuit utilized the meat, hide, bones, sinew.
- The Inuit used inuksuit and special equipment to hunt caribou.
- The caribou had an impact on trade with Dene and other tribes.
- Inuit used caches for later use.
- The membrane of the caribou was used as a band aid.

### *Key Experiences/Activities*

- Have your students skin the caribou leg, separate the bone, take the tendons off the hoof.
- Have your students shape meat for drying.
- Have your students prepare sinew for sewing. When it is dry, have the students learn how to make thread from it.
- Have your students skin the whole caribou; gut, butcher and share.
- Have your students sew hide/skin.
- Have your students prepare equipment, food, tools, etc. for hunt.
- Have your students make a game or tool from caribou antler and/or bone.
- Have your students do stalking techniques out on the land.
- Have your students learn more caribou string games.

Grades 10 - 12

### *Objectives*

Students will:

- appreciate and respect the great knowledge about caribou that Inuit have gathered.
- know the historical and modern locations and names of different caribou herds in the north.
- appreciate Inuit and scientific approaches to the conservation of caribou.
- appreciate the social and community aspects of hunting caribou and sharing the catch.
- understand how changes in the environment affect caribou.

### *Knowledge and Traditions*

- The Inuit utilized the meat, hide, bones, sinew.
- Inuit can identify different herds, how healthy the herds are and where they migrate.
- Few berries and other plant life indicate that caribou will be scarce in that area.
- The Inuit can identify the different life stages of the caribou.

### *Key Experiences/Activities*

- Have your students skin the caribou leg, separate the bone, take the tendons off the hoof, dry the skin and cook the hoofs. When the skins are dry, they can sew them into mitts.
- After preparing caribou sinew, have the students sew an article using the sinew.
- Have your students skin the whole caribou, gut, butcher and share with the elders. The caribou can also be cooked or prepared before sharing.
- Have your students research the traditional way of sharing caribou meat and hide with others.
- Have your students prepare equipment, food, tools, etc. for hunt. then they can go on a short trip.
- Have your students learn different ways of preserving the meat.

## Bears

*"Once shot in the hips, they never get up. Shooting at the key area can make bear hunting as easy as killing caribou or seal."*

Mikitok Bruce



Photo: R. Schweinsberg

A mother and her cubs

"When a bear locates a den, it remains there until March. If you see a bear den during the winter, you need not be fearful- just cautious. Polar bears are big and fast. As you approach the den, make sure that your dogs haven't scattered snow over the passageway. A covered hole can result in your falling into the den. To discover whether a bear is in the den, poke your mitt or rifle case through the hole. This will arouse the bear and draw it out into firing range. When I hunted bears in the past, I would try and shoot them about an inch from the head. If you wound the bear in its den, you must enter and kill it. To miss with your first shot is risky.

Once, I saw my dogs go over to a den and stop abruptly. Suddenly, a bear seemed to appear from nowhere. The dogs hadn't even noticed it. The bear began to chase me and I realized that I had to get my rifle from under the tarp on my qamutik (sled). As fast as it appeared, the bear returned to its den. The dogs began digging at the den. I arrived at the passageway and aimed at the bear's legs. It was enraged, stood up and came out quickly. It had a lot of time to attack. It could have bitten me if it had wanted to. However, it seemed content to lunge at the dogs.

Hunting the polar bear can be amusing, exciting and much safer if accompanied by dogs. In the past, when many hunters had only harpoon and snowknife to defend themselves, the dogs served to chase the bear and tire it out."

Mikitok Bruce  
Ajurnarmat magazine, ICI



## Bears

### *Rationale*

Bears are highly feared and respected by Inuit. Traditionally, the bears have been the spiritual helpers because of their strength and hunting skills. Today, bear skins are still highly prized for their value. The polar bear has been known to stalk human prey and therefore one is encouraged to learn all about them. Since there are often polar bears or other bears that come into a community or close by, parents and elders want children to learn about them. The Inuit have advice on what to do when attacked by a bear and want this knowledge to be learned.

### *Values*

- The Inuit have had certain methods for hunting bears.
- Families showed pride in the bear hunting skills of their family.
- People were encouraged to appreciate and respect the strength and skills of bears.
- There was traditional co-operative efforts of a bear hunt.
- The bear was looked on as an animal with great skill and strength.
- A bear fed many people for a long time.

### *Beliefs*

- The weather will become foggy when the bear comes out of hibernation in the spring.
- Do not chew on bear bones, or it will come back to attack you.
- The elders say to slide on a polar bear skin down a melted stream towards an aglu (seal hole) to bring out a seal.
- If a polar bear arrives in a community from the front, it means good luck for the community; if it arrives from the back, it means there will be bad luck.
- Since female bears have a motherly instinct, do not let an infant cry for too long or the bear will come to check on the crying baby.

### *Major Understandings*

- All bears are territorial.
- Black bears and grizzly bears go into a den and sleep during the winter.
- Some bears live only below the tree line.
- Never eat raw polar bear meat. Make sure it is well cooked.
- Bears are never to be considered to be cute and cuddly, or like teddy bears.
- Bears have good hearing.
- The liver of a polar bear is removed as soon as the bear is dead.
- A bear will eat a human only if it is starving. In most cases, a bear will not kill a human as food.
- Bears eat ground squirrels, aqpiit, blackberries, blueberries, cranberries, fish, seals and whatever they can kill.

### *Attitudes*

Students will be encouraged to:

- appreciate the role of dogs in a bear hunt;
- appreciate why the bears have a history of being spiritual helpers;
- recognize that a hunter who has killed a bear is respected for his strength, cunning and skill;
- fear and respect bears;
- recognize that there are many stories about bears.

# Bears

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives*

Students will:

- hear and share stories about bears.
- develop an appreciation and respect for the power of bears and understand that they are dangerous.
- learn which species of bears live in the north and where they live; in particular which bears can be found near their community.
- begin learning about traditional and modern uses of bear skins.

#### *Knowledge and Traditions*

- Children slid on bear skins to clean them as well as to have fun.
- When a man killed a bear, he was considered to be a great hunter.

#### *Key Experiences/Activities*

- Learn different kinds of string games that tell stories about bears.
- Invite the Wildlife Officer to talk about bears. S/he will probably have videos and other resources on bears to share with you.
- Invite hunters to tell stories about their experiences with bears that will help students appreciate that bears are powerful and can be dangerous.
- Ask students to bring to class items made from bear skins or stories about how bear skins were used.
- Make or cut out pictures of black, grizzly, and polar bears and place them on a large map of the north in the areas where they occur.

### Grades 4 - 6

#### *Objectives*

Students will:

- discuss beliefs about bears.
- learn from elders, hunters, and Renewable Resource Officers how to prevent problems with bears and what to do if attacked.
- learn about the diets, habitats, behaviour and seasonal cycles of bears that occur locally.
- learn the names for the parts of a bear.
- understand and appreciate the power of bears as spiritual helpers.
- develop an appreciation for the knowledge and skills of Inuit bear hunters.

#### *Knowledge and Traditions*

- The hunters say that a sleeping bear in a den can be shaken and it will not wake up.
- Polar bears fear walrus but no other animal.
- The teeth of bears were used as amulets.
- Bear skins were used to make wind pants, mittens, and sewn on to the bottom of kamiit (plural for kamik).
- The Inuvialuit used polar bear skins for costumes during the winter for entertainment.

#### *Key Experiences/Activities*

- Have students interview elders, hunters, and Renewable Resource Officers about how to prevent problems with bears and what to do if attacked. As a class, make a booklet that summarizes the material and make it available to other classes.
- Invite an elder to tell stories that illustrate the power of bears as spiritual helpers. Have students draw the stories and make them into a book which the class can give to the elder.
- Do a class research project on beliefs about, and spiritual power attributed to, bears across the north. Are there common beliefs and ideas; major differences? What does this tell about people's relationship to bears? Is it the same today?

## Bears

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

Grades 7 - 9

Grades 10 - 12

**Objectives**

Students will:

- learn the rules and consequences of killing a bear including: community/regional quotas and how hunters are selected; defense kills; subsistence harvest.
- learn traditional and modern hunting methods.
- appreciate the cooperative nature of polar bear hunts and the traditional role of dogs.
- learn about the uses of bear skin and meat.
- understand that bears are slow to reproduce and vulnerable to over hunting.

**Objectives**

Students will:

- learn how to skin a bear.
- appreciate the economic value of bears.
- learn how to organize a bear hunt.
- further develop and practice their hunting skills.
- understand that bears are not numerous.
- understand traditional and scientific approaches to the conservation of bears and appreciate the importance of conservation.
- learn the proper way to show respect for a bear that has been killed.

**Knowledge and Traditions:**

- When a polar bear attacks a human, it will try not to crush the skull.
- When a man killed a bear, he was considered to be a great hunter.
- A piece of polar bear skin was used for watering the runners of a qamutik.
- Bear skins were used as mats when stalking seal, as well as to cover belongings on a qamutik.

**Knowledge and Traditions:**

- When bad weather prevailed over a long period of time, women would burn a piece of bear skin hoping to change the weather.
- The Inuit took some of the berries a hibernating bear has regurgitated for food.
- A tiny piece of polar bear liver was fed to dogs to rid them of their old fur.
- A walrus harpoon was used to kill polar bears.
- Bears can be heard by their walk and their loud breath.

**Key Experiences/Activities:**

- Research the polar bear quotas in your community and region. Why are the quotas set? Who makes the decisions? Talk to hunters, Renewable Resource officers, HTA/HTC members. Do a role play of a discussion about whether to change the quota. Remember to include the bear's voice!
- Have the class make something from bear skin. Invite an elder or other knowledgeable person into help. Then present him/her with the item made.
- Have students ask their families about the uses of bear meat in your community. If it is eaten, have them find out how it is cooked and/or preserved. If appropriate, cook some bear meat in class and invite another class to share it.
- As a class, make a videotape of different hunters telling about how they hunt/ed bears. Try to show how methods have changed over time. Show the video in the community.

**Key Experiences/Activities:**

- If possible, have the class watch and videotape a hunter skinning a bear. Have students help with the skinning where appropriate.
- Do a class research project to find out the economic value of bears. Interview Renewable resource Officers, hunters, HTA/HTC, the managers of the Co-op and/or Northern Store etc. Do a chart that shows the changing values over time (e.g. 20 years if possible). Discuss what influences the value and how the changes affect your community and others in the north.
- Ask the Polar Bear Biologist for Renewable Resources for information on the conservation of bears. Find out why bears are not more numerous. Compare the life cycle of bears and caribou (how many young do they have, how often, how long do they stay with their young etc.). Have students interview elders to find out what beliefs, knowledge and traditions ensured that bears would not be over hunted.

## Seals

*"My grandfather told me I would succeed if I harpooned one seal and lay it in the hole sideways. I did what he advised and killed five seals at a single hole that day."*

Mikitok Bruce



Photo: J. Lee

At the floe edge

"Of all the deals I have caught, there are three instances which I remember well. Once I killed a seal with my fist, another time with a stick, and, on a third occasion, with a hook. These memories stand out in my mind because I killed with neither rifle nor harpoon.

My grandfather showed me how to approach the seals. It is a slow process. Once you sight the seals at their breathing holes, you must approach them slowly by crawling right up to them. You must make different sounds continuously- rub the snow- make it hard- slap it with your hand. If you make the same sound, the seals become nervous. The bearded seals are more difficult to catch and you must concentrate more than ever on making different sounds constantly if you want to put them "to sleep". The ugjuk (bearded seal) has fallen asleep when it puts its head down. This often takes quite a long time and demands much patience on the part of the hunter. On the first hunt, one often wants to rush. You must think before approaching the seal. If you do it wrong, you will fail.

On my first hunt there were thirty seals at the breathing hole. As my father told me, I placed a piece of polar bear skin over the hole. I waited for the seals to retreat, but instead, they dove on me in an attempt to escape through the hole. Although I was able to harpoon one, the others succeeded in entering the hole. I don't believe my father anymore about using the skin to block the hole."

Mikitok Bruce  
Ajurnarmat magazine, ICI



## Seals

### *Rationale*

Seals have sustained the coastal Inuit for many generations. Because of this, Inuit learned how to hunt them at all seasons, made use of their fat, bones and skins, and the best way to preserve the meat and fat. Bearded and other seals were made into all types of clothing and are especially preferred for footwear since the skins can be made waterproof. Hunting the seal is still important to Inuit community life. Seal hunting is a skill the elders and hunters want to pass on to the younger generation. The elders also say the animal clothing is still the best for the northern environment, and the skill of sewing and making clothes must still be learned.

### *Values*

- Patience and endurance are required when hunting seals.
- There is to be respect for the animal that is killed.
- Families showed pride in the seal hunting skills of their families.
- Sharing what you have killed or made was encouraged and respected.
- The Inuit had certain protocols of sharing seals.
- The Inuit have ingenious methods of catching seals.

### *Beliefs*

- When a seal was killed on the sea ice, water was poured in the mouth to show gratitude to the animal and so it would not be thirsty in the afterlife.
- The seal was one of the animals in the water world that came from the fingers of Takannaaluk (the mother of the sea animals).

### *Major Understandings*

- Seals are a major source of food, clothing, shelter and recreation.
- Seals provide an iron rich diet for both the Inuit and their dogs.
- Seals are hunted all year around.
- Sealskins are used for different kinds of crafts, to make mats and wall hangings.
- There are different techniques for hunting seals at different seasons.
- Seals have more than one breathing hole.
- Sealskins used to play a major part in the Inuit economy.

### *Attitudes*

Students will be encouraged to:

- appreciate the many ways the Inuit have learned to use seal skins and seal bones;
- understand that hunting for seals can be dangerous depending on the season;
- learn to kill seals as quickly and cleanly as possible to show respect for them.

## Seals

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades K - 3

##### *Objectives*

Students will:

- appreciate the importance of seals to the Inuit.
- hear and share stories about seals and seal hunting;
- learn about the traditional and modern uses of seals;
- know which species of seals live in the north and where they live;
- appreciate the qualities and uses of sealskin;
- respect and appreciate the seal for its gifts to the Inuit.

##### *Knowledge and Traditions*

- Sealskin and bones were made into toys; to play ajagaag and as a target for highkicks.
- The dark and light hair make beautiful designs on boots and parkas.
- Sealskin clothing was usually worn in the spring until late fall when there was a possibility of getting wet.
- The skins were treated in various ways depending on what they were to be used for.

##### *Key Experiences/Activities*

- Have students make crafts out of pieces of sealskin.
- As a class, watch someone butcher a seal.
- Have students collect items made from sealskin and make a class display. Have students write stories about each object showing how it is/was used.
- Invite several elders to tell stories about seals. Have the class make small gifts out of sealskin and give them to the elders.
- Have students make a wall mural of the different seals that live in the north showing where they live. Which seals live near your community?
- Have the class watch someone making kamiik out of sealskin. Have students draw pictures of the steps involved and make a class booklet that shows how to make kamiik.

#### Grades 4 - 6

##### *Objectives*

Students will:

- discuss beliefs about seals;
- learn about the diets, habitats, and behaviour of seals;
- be able to identify different seal species by appearance, behaviour, or habitat;
- learn to prepare and sew sealskin;
- learn to prepare and preserve seal meat;
- develop an appreciation for the skills and knowledge of seal hunters;
- continue learning about the uses of seals.

##### *Knowledge and Traditions*

- Sealskins were made into buckets, rope, harnesses, whips, and pouches.
- Hunters made sounds like a duck or whistled when hunting seals.
- The Inuit used screens when crawling to a basking seal.
- A bear skin was used to lie on when crawling to a seal.
- A small boat is used to retrieve seals at the floe edge.
- A sealskin was the most useful skin for the preservation of food.

##### *Key Experiences/Activities*

- Do a class research project to learn about the diet, habitats, and behaviour of seals. Involve elders and hunters. Then do a role play or skit where students "interview" different species of seals to find out how they live.
- Divide the class into groups and have each group choose a species of seal. Have each group draw a life-size picture of their seal showing the features that distinguish it. Have them learn about their seal's habits. Then ask each group to present their drawing and describe their seal, and do a skit to act out its behaviour.
- Sew crafts out of pieces of sealskin.
- Have students learn how to chew bearded sealskin for kamik soles.
- Cook seal meat. Invite families in to class to share it and tell stories about seal hunting.
- Have students share stories about the first seal hunting trip of their own or someone else in their family.

## Seals

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades 7 - 9

##### *Objectives*

Students will:

- begin to learn and practice traditional and modern techniques for hunting seals, including stalking, killing, and retrieving;
- become familiar with seasonal differences in hunting techniques;
- appreciate the dangers of seal hunting and learn how to hunt safely;
- learn how to skin and butcher a seal;
- learn about the food chain that the seal is part of;
- continue working with sealskins.

##### *Knowledge and Traditions*

- Sealskins were used as tents, and as roof tops of fall and spring igluit (plural for iglu).
- Sealskins were made into kamiit, pants, atigi, mittens, outer pants, and boots for dogs.
- Young sealskins are scalded to remove the fur.
- Hunters made sounds like a duck or whistled when hunting seals.
- Hunters lay on a bear skin on when crawling upwind to a seal, imitating the seal by raising their heads and feet and scratching the ice.
- A sealskin was the most useful skin for the preservation of food.

##### *Key Experiences/Activities*

- Have students find out the best time to hunt for basking seals, and the techniques of crawling to a basking seal. Have them practice the technique.
- Have students interview hunters about all the various ways of hunting seal. Make a class booklet that describes and illustrates the techniques.
- Have students learn the names of the traditional months that have anything to do with seals. Make a calendar for your class.
- Have someone demonstrate skinning and butchering a seal and allow students to help.
- Arrange for each student to go on a seal hunt, in small groups with hunters or with their families. Have them report to the class about their experience.
- Invite someone to show the technique of cutting a bearded seal skin for ropes and for clothing.

#### Grades 10 - 12

##### *Objectives*

Students will:

- further develop their skills in hunting seals safely in different seasons;
- learn the proper way to show respect for a seal after it has been killed;
- learn about the economic value of sealskins, formerly and today, and understand the factors that influence their value;
- understand the need for and approaches to conservation of seal populations.

##### *Knowledge and Traditions*

- Ugjuk (bearded seal) skins are chewed to make soles for kamiit and to make rope.
- The Inuit used screens when crawling upwind to a basking seal and took turns crawling to it.
- During winter, dogs were trained to sniff out breathing holes covered with snow.
- A hunter is left with the head and skin if the meat is distributed to the camp or community.
- Upon killing a seal, the hunter must share the liver.
- A small boat is used to retrieve seals at the floe edge.

##### *Key Experiences/Activities*

- Have students find out what to do when a seal is shot on ice, in the water, or at a floe edge. Have them prepare a skit that shows seal hunters in each of those situations.
- Have students make ugjuk (bearded seal) rope.
- Arrange for students to go on a seal hunt with knowledgeable hunters and to take part in killing, skinning, and butchering a seal. If appropriate, have them share some meat with the class or make something from the sealskin.
- Do a class research project on the animal rights movement and its impact on sealing and the Inuit lifestyle.
- Divide the class into three groups. Have them write stories showing 1) traditional approaches to the conservation of seals, 2) scientific approaches to the conservation of seals, and 3) what might happen if conservation were not practiced and there were not enough seals to hunt.

## Fish

*"Preparation of dried fish was always done by women, although today with the social changes taking place, any person can do the work provided he's willing."*

Mark Kalluak



Photo: T. Macintosh

George Kamookak ice fishing, Gjoa Haven

### *Dried fish*

"Caribou makes good nipku when the meat is not so fresh, but fish is not the same as caribou meat. During the hot summer season, fish tend to get soft quickly. Under these circumstances, they must be dressed while they are fresh. Avoid direct exposure to sunlight so they will not get soft from the heat. Remove the heads and the bones and hang them out to dry over a horizontal pole placed on two criss crossed supporters on each end. The meaty part should be exposed to dry with the skin inside. It would be even better to soak the fish in salty water before hanging it out to dry."

Eric Anoee  
Isumasi magazine, ICI



## Fish

### *Rationale*

During times when there were not many caribou, Inuit depended on fish for sustenance. Fish were also fed to dogs. Large quantities of fish were caught in late summer and fall and preserved for the winter. Fishing can be done at any time of the year. Children and adults enjoy fishing, particularly in the spring time when they can fish through the ice. Interest in catching fish for commercial sale is growing, and communities will probably become more involved in this. It would be interesting to find out about fish or shrimp boats in various regions, including Arctic Quebec, to see how they market fish.

### *Values*

- People and animals depend on fish in their diets
- People were told not to waste fish
- Inuit have learned how best to preserve fish for their climate and way of life
- Fishing as a family was to be enjoyed.
- The Inuit had ingenious methods of catching fish.

### *Beliefs*

- When Inuit went fishing, they tried to be in a happy mood in order to catch a fish. If they tried fishing while upset, it was believed they would have no luck.
- There are stories of giant fish near Coppermine, Cambridge Bay and Baker Lake.
- The Inuit say there are often very large fish that live in the middle of a deep and large lake. They caution people not to cross these large lakes.
- If you sniff somebody else's smelly feet, you will catch lots of fish.

### *Major Understandings*

- There are different fishing methods, both traditional and modern.
- There are different kinds of fish.
- The Inuit have terms for different parts of the fish
- Fish supplemented caribou when caribou was scarce or not available.
- The Inuit know fish migration routes and spawning areas.
- Arctic char are native to only certain parts of Canada.
- The Inuit are selling fish to other places as part of their economic development.

### *Attitudes*

Students will be encouraged to:

- appreciate how Inuit adapted their fishing methods to suit their environment; and
- enjoy trying various ways of catching or using fish.

## Fish

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades K - 3

##### *Objectives*

Students will:

- hear stories, songs and learn games about fish, fish parts and fishing;
- appreciate the importance of fish, especially char;
- understand there are many different kinds of fish, some occurring naturally only in the north;
- learn the names of different kinds of fish near the community, and learn where they can be found;
- appreciate that there are different methods for catching fish;
- begin to learn about the uses of fish;
- enjoy fishing with their families.

##### *Knowledge and Traditions:*

- Fish head bones have specific names and are used for creating stories of animals and people for entertainment.
- Fish backbone can be dried and made into a toy (niliqtaut, imiqluktaq).
- Women did the fishing while the men hunted.
- There are songs that one sings while ice fishing.

##### *Key Experiences/Activities:*

- “Plan a fishing trip”. Ask students to talk about what their families do to get ready for a fishing trip.
- Make a class display showing and naming the different kinds of fish that live in your area.
- Have a “Fish Feast”. Plan the menu. Ask the community to donate fish to your class. Cook the fish and other food. Invite elders and families. Share stories about fish and fishing. Have students make gifts ahead of time to offer to the fish in thanks for its gifts to the Inuit. Have each student tell what they are thanking the fish for.
- Have students make fish masks out of cardboard and paint them. Have students use the masks to act out stories about fish.
- Take the class to bodies of water near the community that have fish in them. Find out what kind of fish live there and the best time to catch them. Try fishing.
- Have students write about their first fishing trip.

#### Grades 4 - 6

##### *Objectives*

Students will:

- learn about the diet, habitat, life cycle, history, behaviour and habits of char and other local fish;
- discuss Inuit beliefs about fish;
- learn the names and uses for parts of a fish;
- be able to identify the different kinds of local fish;
- begin to learn which fishing methods are best for different kinds of fish, different places, and different seasons;
- learn to prepare, preserve, and cook fish;
- learn which places have traditionally been used for fishing.

##### *Knowledge and Traditions:*

- Dogs are not allowed to eat too many raw fish.
- Fish caches are made in the fall.
- Fish heads, aged or cooked, are considered to be delicacies.
- Fish eggs, liver and stomach are considered to be delicacies.
- When there was an overabundance of fish in the summer, they were cached for winter.
- Inuit learned to use all parts of the fish.

##### *Key Experiences/Activities:*

- As a class, make a “fishing calendar” that shows what fishing activities take/took place at different times of the year, including what kinds of fish to catch, and where and how to catch them. Include both modern and traditional activities. Have students illustrate the calendar, and include local stories, songs and beliefs about fish if there is space. Make copies of the calendar and make them available to the community.
- Have students cook and serve a meal of fish, trying all the edible parts. Invite elders to the meal. Find out what fish bones and skins were used for.
- Have students interview people in the community to find out which places have traditionally been used for fishing. Make a map showing and naming these places. Draw pictures of the fish that can be found in each place. Visit some of these places. Are they still used for fishing today? If not, why?

# Fish

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

Grades 7 - 9

Grades 10 - 12

### *Objectives*

Students will:

- learn traditional and government rules and regulations for fishing, and understand the reasons for them;
- understand the importance of fish in northern food chains;
- practice traditional and modern fishing methods at different seasons;
- learn to recognize good fishing spots;
- appreciate the economic value of fish;
- become familiar with Inuit and scientific approaches to classifying and categorizing fish.

### *Objectives*

Students will:

- learn about local fish migration routes and spawning areas and appreciate their significance;
- understand how human activities can influence the survival of fish populations;
- learn about the fishing industry and consider the feasibility and implications of developing a commercial fishery;
- understand the relationships between fish and their environment;
- continue practicing and enjoying fishing.

### *Knowledge and Traditions:*

- Fish skins were used as tool bags for men and women.
- Fish skins were used as temporary patches for kamik soles.
- Fish skins were used for storing oil or fat for a qulliq (stone lamp).
- Fish bellies were used to make lard for cooking.

### *Knowledge and Traditions:*

- Some areas have land marks that indicate good fishing spots.
- Frozen fish were sometimes used for making sled frames and bars.
- Men and boys made fish weirs in the spring and summer, and in some other areas, in late summer or early fall.
- Fish weirs are to be dismantled after fish are caught for the season.

### *Key Experiences/Activities:*

- Choose a fish that is important in your area, such as char or arctic cod. As a class, find out about the food web this fish is part of and diagram it. Discuss what would happen if the fish were removed from the food web. List everything that would be affected. Have students write stories about life without this fish.
- Invite a fisheries officer to speak about fishing rules and regulations. Discuss the reasons for them. What has changed that makes regulations necessary now? Invite an elder to talk about traditional approaches to preventing over fishing? Do they work today? Are they still practiced?
- Have students give written and/or oral "trip reports" throughout the school year. Make them similar to book reports, but have the students tell about each fishing trip they take, including when, where, how they fished, what they caught, and what they learned.

### *Key Experiences/Activities:*

- Have students research local fish migration routes and spawning areas and draw them on a map. Visit the areas and investigate why they might be important to the fish (special food, shelter, water temperature or conditions?). Try to find out if the routes/areas used by the fish have changed with time.
- Do a class research project on the fishing industry. You may want to correspond with a community that has a commercial fishery. Set up a role play in which various community interest groups discuss whether they want to set up a commercial fishery in your community.
- Have students learn how to take care of a net.
- If possible, set up a class fishing project where students take responsibility for setting, checking, and maintaining nets for a period of time. Have them preserve some of the fish to be shared with the school, and distribute the rest to elders in the community.

## Whales

*"The crew was instructed to remain with the boat always and to be prepared to take off at a moments notice in case a whale was sighted near the floe edge."*

Ittuangat Aksaarjuk



Photo: G. Calef

Beluga whales

"The men and women were whaling again. The older men and women would go up onto a hill to watch what the whaling boats were doing. When the men were chasing a whale, all the women were told to lie down flat on their backs, all day if necessary. Only when the whale was killed were they told they could sit up again. While we waited for the men to come ashore there were many activities to keep us busy. The older women would make hair pins out of white sealskin and grass, and have them ready for when the whalers came back on shore. Sometimes the elders would play games with the children. They would tie a leg of one child to that of another and the pairs of children would try to knock each other down; even the grown-ups used to join in.

In the meantime the women who had sons had to fill pails with fresh water. Then the whaling boats came in, rowed by the children and the older adults, and towing the blue whales. While rowing, they got really hot and sweaty so the women who had sons picked up their water buckets and waded out into the water to meet the boats.

When they all got ashore they cut up the muktuk of the whale and everyone tried to get lots of it to take home. The women would put the muktuk in their kiniks, which is the front apron of their amautiks. They would hold the apron up to make a pouch."

Leah Arnaujaq  
Recollections of Inuit Elders,  
ICI



## Whales

### *Rationale*

Whales gave families enough food to last them a long time. Whales were hunted by the whole camp as they were often difficult to kill, particularly the bowhead whale. When southern whalers arrived to hunt whales, some Inuit were hired to help them and learned new hunting techniques. This changed life for many camps where whales were over-hunted. The whale hunting in the North and around the world has created much controversy. It would be interesting for students to research what impact the whalers had on camps when they first arrived to hunt the bowhead.

### *Values*

- The whales have sustained families and camps for generations.
- There was pride in the ability of the family to hunt whales.
- The whale was shared with others after a successful hunt.
- The Inuit knew how to hunt whales before there were rifles.
- A whale could feed many people and dogs.
- There was co-operative effort in hunting whales.

### *Beliefs*

- Little boys or new fathers were encouraged to pack babies to ensure they will someday kill a whale.
- Eating muktaaq from around the blow hole will cause insomnia.
- Never show joy when a water animal is near death, otherwise the animal will come alive and swim away.

### *Major Understandings*

- There are a variety of whales in the north.
- There are names for different parts of the whale and their internal organs.
- The baleen of a bowhead whale has many uses.
- There are various methods of preserving muktaaq and whale meat.
- Bowhead whales are still hunted in the Beaufort-Delta.
- The whalers from the south came to the north because of the bowhead whales.
- Whale hunting is regulated today because it is easy to over hunt whales and cause them to be endangered.
- There are specific whale hunting techniques.

### *Attitudes*

Students will be encouraged to:

- understand that whales are powerful and have to be hunted with great care.
- respect and understand the modern regulations placed on whale hunting;
- realize that people are working hard to make sure that whales are not over-hunted.

# Whales

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### **Objectives**

Students will:

- appreciate the importance of whales to the Inuit.
- hear stories about whales and whale hunts.
- learn the names of whale species that live in the north.
- learn how whales have been used locally.
- respect and value whales as part of the Inuit world.

#### **Knowledge and Traditions:**

- Muktaaq is a delicacy, especially if it is aged.
- In some regions whale meat is dried and stored.
- Inuit shared many whaling stories after a successful whale hunt.

#### **Key Experiences/Activities**

- Invite an elder to tell stories and facts about whales. Have your students ask prepared questions. Later, have the students illustrate and/or write what they learned. Display.
- Invite the Wildlife Officer to talk to your students about whales in your area. Perhaps a video tape of Northern whales can be provided. After the presentation, have the students ask questions. Later, make a class book on whales.
- Brainstorm with your students on what they know about whales. Make a list of questions or facts they want to learn more about and discuss where they might find the answers: maybe from the library or a hunter.
- Invite a knowledgeable person to talk about how the muktaaq or the meat is prepared and preserved. If possible, have muktaaq or whale meat to cook or eat.
- Have the students write a story of whaling or whales. Make the stories into a class book.

### Grades 4 - 6

#### **Objectives**

Students will:

- discuss beliefs about whales.
- appreciate the skills and knowledge needed to hunt whales.
- be able to identify whale species that occur locally and know where and when they occur.
- begin to learn and try various methods for preserving muktaaq and whale meat.
- learn about the diets, habitats, behaviours, life cycle and migrations of whales.
- appreciate the social and community aspects of hunting whales and sharing the catch.

#### **Knowledge and Traditions:**

- Muktaaq is prepared and preserved for later use.
- In some places, whale meat is considered dog meat.
- Hunting bowhead whales take great skill, knowledge and cooperation.

#### **Key Experiences/Activities:**

- Invite the Wildlife Officer to talk about whales in your region. Have the students ask prepared questions. What kind of whales are there? What are the quotas? Where do they migrate? What are the regulations? What is the life span?
- Invite an elder or a hunter to talk about whaling. What was it like? What is it like now? What is the best way to hunt whales? Where is the best place to hunt whales?
- Have your students go to the beach after a whale hunt and help the hunters. Find out how the muktaaq and the meat is distributed and how it is preserved. Later, have the students write what they learned.
- Have a class discussion on beliefs of whales with an elder present during the discussion.
- Have the students research a particular whale. What do they eat? How long do they live? Where do they live? How big are they?
- If possible, have your students prepare and preserve whale meat and muktaaq.

# Whales

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- begin learning the methods for hunting whales skillfully and safely.
- learn the names for the different parts and the internal organs of whales.
- understand the whale's place in the food chain.
- understand the historical impact of southern whalers on Inuit communities and whale populations.
- respect and understand the need for modern regulations on whale hunting.

#### *Knowledge and Traditions:*

- The skin of the beluga can be used as a sole for kamiit.
- The stomach and gullet were used as oil bags.
- The lungs and the intestines were thrown away.
- Narwhal tusks are made into carvings or sold.

#### *Key Experiences/Activities*

- Invite an elder to talk about whale hunting. Have the students ask prepared questions. What are the dangers? Where do they hunt them? What season? What is the best way to prepare and preserve muktaaq and whale meat?
- Have your students learn the names of the organs of a whale. What are/were they used for? Which parts are/were eaten? How were they preserved? How were they removed?
- Invite the Wildlife Officer to talk about regulations of whale hunting. Have the students ask prepared questions. Later, have a discussion with your class on what they learned. Do they agree with the regulations? disagree? What do the elders feel about the regulations? Why are the regulations important?
- Have your students research the history of whaling. Invite a knowledgeable person for part of the research. What impact did it have on the North? on Inuit? on the economy?

### Grades 10 - 12

#### *Objectives*

Students will:

- continue to learn traditional and modern techniques for hunting whales.
- learn the proper techniques and manners for respectfully skinning and butchering a whale.
- learn why whales are so easily over hunted and what can be done to ensure conservation.
- appreciate the international aspects of modern commercial whaling and their impacts on the north.

#### *Knowledge and Traditions:*

- To kill a whale, you must aim at a certain spot near the blow hole.
- A whale thinks a speeding boat is a killer whale and will dive quickly.
- The stomach and gullet were used as oil bags.
- The skin of the beluga can be used as a sole for kamiit.
- Inuit know where whales are, their migratory routes, and the best method for hunting them.

#### *Key Experiences/Activities:*

- Invite a knowledgeable person to talk about the traditional methods of killing whales. Later, have the students discuss what they learned. Then, have them write an information story on whales.
- Encourage your students to participate in a whale hunt. After students have participated, have them share their experiences with the others. Who was the leader? How were the whales killed? How was the whale butchered? How was the muktaaq and meat distributed?
- Have your students go to the beach after whales have been caught and help. Encourage them to ask questions on the protocols of butchering and sharing. Later, have the students share with each other on what they learned?
- Have your students research whale hunting around the world. What do other countries use them for? What are the regulations and quotas? How does that impact on the North?
- Invite a hunter to tell stories about hunting whales and how everyone worked together.

## Fox

*"The Tan'ngit trappers were very experienced at trapping but they did not know our land and climate as well as our people. In order to obtain help from the Inuvialuit, they encouraged our people to trap along side them."*  
Inuvialuit Pitqusiit



Photo: C. Shank

Young arctic fox

"If a trapper were to keep his skidoo in good repair, he could do a lot of trapping in a single season. I recall one occasion when my twenty-two foot qamutik (sled) was piled so high with pelts that there was little place on it for anything else. I preferred not to use the old way of trapping- a method using rocks and ice. Instead, I used the whiteman's way. I still do.

To position a trap in the snow is extremely difficult. The bait must be put on the spring and not the teeth of the trap. Powder-like snow should be used when covering the trap. The layer of snow concealing the trap has to be thin- so thin that one can see the shadow of the trap. If this isn't done, the fox will not be trapped. When checking my trapline and coming upon a fox, rather than allow the animal to freeze, skin and all, I remove the fur immediately. This saves a lot of work at home later on."

Mikitok Bruce  
Ajurnarmat, ICI



## Fox

### *Rationale*

The fox became more important to Inuit when its fur became valuable for trade. Inuit had various uses for fox fur and knew how to clean the fur. There are many stories about the number of foxes families trapped when the industry was at its peak. Although people ate the meat, it became less appetizing when more foxes seemed to be rabid. Fox furs are still used today as parka trim, but they do not have the same value for trading as they did before. International opposition to trapping has had impacts on the north. There are also newer and more humane traps that are used for trapping foxes. Utilize your Wildlife Officer for information on this.

### *Values*

- The foxes are to be respected as part of the cycle of life
- The foxes are to be appreciated for their unique qualities.
- The foxes are to be appreciated for their importance to Inuit
- Foxes are not to be ever treated cruelly
- The Inuit were encouraged to respect the habitat of the fox, just as the fox respects human habitat

### *Beliefs*

- It is believed that if you say an animal is cute, cuddly or pretty, it is like you are inviting them to your camp or to attack you.
- It is believed that if you wish that you could see this animal, it will suddenly come upon you.

### *Major Understandings*

- There are different kinds of foxes.
- Foxes are smart and cunning.
- Foxes are scavengers.
- Foxes have keen hearing and can hear small animals under the snow.
- Foxes den in sandy areas or on high land where they can dig burrows above the permafrost.
- There are usually fox droppings around food caches.
- Fox traps have changed over the years from traditional traps (eg: stone traps) to modern and humane methods of trapping.
- After whaling, fox furs became the major trading commodity.
- Men and women worked together cleaning, fleshing, stretching and drying the fox furs.

### *Attitudes*

Students will be encouraged to:

- Appreciate the methods the Inuit had for trapping foxes;
- Respect the regulations in their community regarding fox trapping;
- Appreciate the various methods the Inuit had to clean fox furs;
- Appreciate how the fox has adapted to its environment.

## Fox

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades K - 3

##### *Objectives*

Students will:

- appreciate the importance of the fox to the Inuit;
- hear stories about foxes;
- learn the names for different kinds of foxes;
- learn about and appreciate the unique qualities of foxes;
- begin to value foxes as part of the northern land;
- know what kinds of foxes occur near their community.

##### *Knowledge and Traditions*

- The head of a fox is used for ajagaq because it is light.
- Fox fur is used for trim and for overboots.

##### *Key Experiences/Activities*

- Invite a hunter to tell stories about trapping fox. Have your students ask prepared questions about types of traps and when to trap foxes. What did the trappers do with the furs?
- Invite someone to tell stories about the dangers of foxes. Later, have a discussion on what they learned. Prepare a class book after this presentation.
- Ask over the radio station for fox skulls. Have your students learn to use it for ajagaq.
- Ask the community for donations of fox skins, or have your CEC purchase them. Have the students brainstorm ideas on what to make from the fur.
- Have the students learn the names of the stages of foxes, where they live, what they eat and who hunts them.

#### Grades 4 - 6

##### *Objectives*

Students will:

- learn about the life of foxes: their diets, habitats, behaviour, and movements;
- be able to identify different species of foxes and know where they live;
- begin learning the various methods for cleaning and preparing fox furs;
- learn the traditional and modern uses for fox fur;
- learn how and why fox traps and trapping methods have changed over the years;
- be able to recognize a rabid fox and know what to do if they see one.

##### *Knowledge and Traditions*

- The head of a fox is used for ajagaq because it is light.
- Inuit men do not use white fox fur trim on their parkas because it shows they are not good hunters.
- People ate fat foxes when they had nothing else to eat.

##### *Key Experiences/Activities*

- Have your students study the fox. What varieties are there? How are they important?
- Make a community announcement that your students are willing to clean fox fur. Invite a knowledgeable person to show your students how to properly clean the fur. When they are finished, return them to the original owners.
- Invite a person from Renewable Resources to talk about the fur industry. What are the regulations, prices, procedures, etc? Record this information and have the students make it into an information booklet for the community.
- Have the students research stories about rabid foxes. Have them find out what to do when a rabid fox comes to the community. What precautions should they take? What should they do if they ever got bitten? How do rabid foxes affect other animals?
- Have the students research uses of fox fur other than for economic reasons.

## Fox

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

Grades 7 - 9

#### *Objectives*

Students will:

- learn the techniques and equipment used for trapping foxes humanely;
- study the history of fox trapping and the fur trade and understand its influence on the Inuit way of life;
- learn how the fox has adapted to its environment;
- learn and respect the regulations in their community regarding fox trapping;
- know how to skin a fox and prepare the skin.

#### *Knowledge and Traditions*

- Traders would pile fox furs to the height of any item the hunter wanted, for example, a rifle was stood up-right and the fox furs piled to that height.
- People used flour to clean the furs, or if the skin was too oily, they used flour mixed with gasoline to clean the fur.

#### *Key Experiences/Activities*

- Invite a knowledgeable person to show your students how to clean fox skins.
- Invite a knowledgeable person to tell your students how they traditionally caught foxes.
- Have your students find out the population of foxes in your region. Compare with other places.
- Invite a person from Renewable Resources to demonstrate the humane traps to your students.
- If possible, have your class set fox traps. Have the students take turns checking the traps. When a fox is caught, have the students skin and clean it with the help of a knowledgeable person. Find out what should be done with the meat.
- Have your class research the history of trapping in their region. What did it do for families? How did it change their lives? How did it change the the North? What has it done to the population of foxes?

Grades 10 - 12

#### *Objectives*

Students will:

- be familiar with the views of animal rights and anti-trapping activists, and recognize their influence on Inuit way of life;
- understand the political and economic aspects of trapping;
- learn about the population cycles of foxes;
- learn the procedure for selling fox furs and be familiar with the operation of the fur exchange.

#### *Knowledge and Traditions*

- People ate fat foxes when they had nothing else to eat.
- Rabid foxes that came into a community were hunted down with axes, chisels and rifles.
- People used flour to clean the furs, or if the skin was too oily, they used flour mixed with gasoline to clean the fur.
- A rabid fox that came into a community created much excitement and was chased down with much enthusiasm.

#### *Key Experiences/Activities*

- Have your students research the views of animal rights. How do they agree with them? How do they disagree? Why do animal rights exist?
- Have the students do a debate between the pros and cons of trapping.
- Have the students write fox stories, fictional or true. Later, they can share these stories with younger students. They can also make it into a book for the library.
- Have your students research traditional beliefs or stories about foxes. Share what they have found with their classmates.
- Have the students study the fur industry. What are the regulations? How do they affect the economy of the North? What do they think will happen to trapping in the North?
- Have your students become familiar with the life of a trapper. They can study the life of a Dene trapper.

## Wolverine

*Women dyed the skin with crushed red rocks for decoration; it also helped preserve the colour of the skin.*



Photo: T. Macintosh

George and Mabel Angolitok, Cambridge Bay

### The Raven and the Wolverine

A raven and a wolverine were good friends. One day, the wolverine asked the raven for his daughter to become his son's wife. The raven was happy about this. The wolverines were good hunters and he thought they would look after his daughter very well.

But the raven was wrong. As soon as the girl arrived in the wolverine's house, she was made to do all the hard, dirty work. The wolverines kept her with the dogs and gave her wolf skin clothes. They tied her tongue with thread so she could make no noise.

One day the raven decided to visit his friend the wolverine to see his daughter. He had heard nothing about her and thought something was wrong. As soon as he arrived, he asked to see his daughter but they said, "Her eyes are hurting. She is sleeping in the dark room and cannot come out."

The girl sleeping in the dark room was not really the raven's daughter. She was a wolverine, but it was so dark that the raven could not see very well. His real daughter was sitting near him but she was so dirty and ugly that he did not know who she was.

That night the wolverine told his old friend to be careful when he went to bed because the ugly girl tried to bite people. During the night the raven woke up to find the ugly girl's mouth near his fingers. He was going to push her when he saw that her tongue was tied. He took out a knife and cut the thread. At once the girl told her father what had happened.

In the morning before anyone else was awake he got his dogteam ready and told his daughter to wait near it. Then, shouting as loud as he could, he woke up the wolverine. He demanded to see his daughter who he had been told was in the dark room.

"She cannot come out," said the wolverine. "her eyes are too weak." "Liar!" shouted the raven, "My daughter is outside. I am taking her home with me. I did not give her to you to be your slave."

Quickly, the raven ran away from the house and shouted to his dogs. He hurried back to his camp and from that time never visited or talked to a wolverine again.



## Wolverine

### *Rationale*

The wolverine is more important in some areas than others depending on their availability. The Inuit say the fur is the best for repelling moisture, which is important when used as a parka trim. The Inuvialuit have beautiful and intricate parka trims of wolverine fur. There are some communities that do not have wolverines nearby. For those communities, wolverine fur is usually bought. Wolverines are considered to be very cunning and difficult to kill. The Inuit respect all animals for their abilities, but since most animals are fearful of the wolverine, the stories about them depict the wolverine as an animal with almost supernatural powers.

### *Values*

- Wolverines are to be respected for their unique qualities.
- People shared their stories and thoughts of wolverines.
- People showed pride in their family member's ability to catch wolverines.
- The wolverine is fiercely protective of its young.
- The Inuit found wolverine fur to be very useful.

### *Beliefs*

- If someone can catch up to a running wolverine, it means they are very good runners.
- Wolverines are believed to be able to "hug" a man to death.
- The Inuit think the wolverine has special powers.
- The Inuit think wolverines are feared by all other animals in their domain.

### *Major Understandings*

- Wolverines are not afraid of other animals.
- Wolverine fur makes the best parka trim.
- It is important to use caution when checking a wolverine trap as wolverines are strong and cunning.
- Wolverines can outsmart many animals.
- The wolverine has adapted to its environment.

### *Attitudes*

Students will be encouraged to:

- recognize that the wolverine is an animal that other animals respect and fear.
- appreciate how the wolverine has adapted to its environment.
- appreciate the great strength of the wolverine.

# Wolverine

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives*

Students will:

- hear stories about wolverines.
- appreciate the unique qualities of wolverines.
- respect wolverines for their strength and cunning.
- find out where wolverines occur in the north and whether they occur locally.

#### *Knowledge and Traditions*

- Wolverine are important to Inuit.
- Because of the nature of wolverines, there are some very interesting stories about them.

#### *Key Experiences/Activities*

- Invite elders in to tell stories about wolverines.
- Collect stories about wolverines from other northern regions and cultures. Compare them to local stories. Are there qualities about wolverines that all cultures seem to note and respect?
- Have students draw a wolverine story.
- If there are no wolverines in your area, correspond with a class in a community where wolverines are more important. Ask them to "introduce" your class to the wolverine. "Trade" them for an animal that is more important in your area than theirs, and introduce them to that animal.

### Grades 4 - 6

#### *Objectives*

Students will:

- learn about the wolverine's diet, habitat, and behaviour.
- discuss beliefs about wolverines.
- appreciate why the Inuit think wolverines have special powers.
- learn about the traditional and modern uses for wolverine fur, in particular why it is the best fur for parka trim.

#### *Knowledge and Traditions*

- Wolverine can play dead so it is important to be careful when checking traps.
- All communities have stories or knowledge of the wolverine.

#### *Key Experiences/Activities*

- "Adopt" a wolverine for a while. Have students draw a large picture of the wolverine and put in in class. Have them learn everything they can about what it eats, how and where it lives, how it behaves. Display the information they learn with the picture. When they think they know enough that they could successfully "look after" it, "let it go". Have students write down their feelings about the wolverine, and describe why it is important to the northern land.
- Collect examples of wolverine fur used in different ways. Have students find out why wolverine is the best fur for parka trim. Compare wolverine fur with fur from other animals.
- As a class, discuss the idea of having the wolverine as a symbol or "guardian" for the class. Is it an animal students would want to have a special relationship with? Why or why not?

# Wolverine

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

Grades 7 - 9

Grades 10 - 12

### *Objectives*

Students will:

- learn how the wolverine has adapted to the northern environment.
- learn traditional and modern methods of catching wolverine.
- be able to skin a wolverine and prepare the fur for market.
- find out what the Dene and other northern cultures think of the wolverine.
- know and respect the regulations for trapping or hunting wolverine.

### *Objectives*

Students will:

- learn how wolverine fur is marketed.
- be able to show proper respect for wolverine they catch.
- find out how abundant wolverines are near their community and in other areas of the north.
- understand why there are not great numbers of wolverines.

### *Knowledge and Traditions*

- If you shoot and miss a wolverine, it will stand and look at you.
- Wolverines can raid your cache by removing one rock at a time.
- Wolverines are capable of killing a caribou even though they cannot catch up to one.

### *Knowledge and Traditions*

- Wolverines can raid your cache by removing one rock at a time.
- If wolverines are caught in a trap, they will chew themselves free.
- If a wolverine is attacked, it will go on its back since it is stronger on its back.
- Women dyed the skin with crushed red rocks for decoration; it also helped preserve the colour of the skin.

### *Key Experiences/Activities*

- If people in your community catch wolverines, try to give your class the opportunity to observe a wolverine before it has been skinned. Have students notice the physical features of a wolverine that help it adapt to the northern environment. What behaviours help it adapt? How does it spend the winter?
- Invite a Renewable Resource Officer to talk about wolverines and to discuss regulations for catching them.
- Have someone from the community demonstrate to the class how to skin a wolverine and prepare the fur. Where possible, allow the class to help.
- Link up with a class in a Dene community and share and compare knowledge, traditions, and beliefs about wolverines. Have students write a story about wolverines from the Dene perspective.

### *Key Experiences/Activities*

- Invite a Renewable Resource Officer or other knowledgeable person to talk about the fur marketing process.
- Have students survey hunters/trappers who catch wolverine to find out what method they use, what they do with the meat, and what they do with the fur. Find out how much fur is used locally for parka trim etc., and how much is sent to market. Try to figure an economic value for each.
- Ask elders how to show proper respect when a wolverine is killed.
- Have students research the abundance of wolverine near your community and in several other areas of the north. They might talk to a Biologist or Officer with Renewable Resources, interview hunters and trappers, and/or look at fur return records over a period of time. Discuss why wolverines are generally not very abundant compared to some other animals.

## Birds

*Feathers were used as dusters, to wipe hands with and as brooms among other uses.*



Photo: G. Calef

Birds

“Another song that I often heard was in the Polar Bear and Owl’s story. Here is the story.

A bear and an owl had had a quarrel. The story has it that the owl was spending his time standing waiting for lemmings. A bear happened to pass by, and spotting the owl he made his comments which started the whole thing.

“The stander is standing I see.”

The owl replied, “The walker is walking I see.”

“What, what, what, eyes that don’t roll?”

“What, what, what, round bottom?” Then unknown to the bear the owl flew away, saying, “Catch me if you can.”

“Wait for me, wait for me.” When the bear next saw the owl, he was standing on the other side of a river. He asked him how he had crossed the river. The owl seeing an opportunity to fool the bear said to him, “I drank it up.” The bear started to drink the river. Soon he could contain the river no longer and burst. The water that had once been in his stomach turned to fog. His belief in the owl had been his downfall.

The meaning of this is that one should never be the first to start a quarrel. That you should not purposely go ahead and insult anyone.”

Martina Pihujui Anoee  
Ajurnarmat, ICI



## Birds

### *Rationale*

The arrival of birds is greeted with great joy by Inuit. The songs and beauty of birds are appreciated by everyone. Birds signal a renewal of life and Inuit are thankful that the winter is over. The first sighting of a snow bunting is considered to be an important event, indicating that other birds will follow shortly. There are many beliefs about birds, especially the raven. The Inuit also made full use of the birds they caught. They had various uses for the feathers, bones, fat, tendons and feet of birds. The regulations concerning hunting of ducks and geese are quite upsetting for Inuit and Dene because they follow the season of the South and not the North.

### *Values*

- The birds are to be respected for their uniqueness.
- Children were encouraged to appreciate the strength and ability of birds.
- The Inuit had their own way of protecting birds.
- Children were told not to touch eggs that they were not going to eat.
- Birds ensured survival for Inuit.
- There are many uses for birds, their feathers and body parts.

### *Beliefs*

- The white snow bunting is not to be killed. They are considered to be messenger birds that can relate events to the spirit world.
- If you see a red-throated loon flying very high, it means it's going to rain. In some areas, if you hear a red-throated loon, it means it is asking for rain.
- You can make a crane dance by singing.
- Inuit believe ravens can speak. If you ask a raven where the caribou are, they will indicate the location with their wings.
- Ravens were considered as messengers of bad news as well as mediators between the human world and the spirit world.
- The raven is black because the ukpik (snowy owl) spilt black soot on him.
- A seagull skin rubbed on an infant ensured good eyesight.

### *Major Understandings*

- The arrival of snow buntings indicates that spring has arrived.
- Do not bother a bird's eggs because the mother might abandon them.
- There are many wonderful bird stories.
- There are different methods of hunting ducks and geese.
- Some birds migrate and some do not.
- All birds have their own lice in early spring.
- Birds were not allowed to be killed if they were not going to be eaten.

### *Attitudes*

Students will be encouraged to:

- recognize that birds are very protective of their eggs;
- respect birds, their nests and their habitats ;
- appreciate that some birds travel very long distances to come to the North.

## Birds

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades K - 3

##### *Objectives*

Students will:

- hear stories and songs about birds;
- develop an appreciation and respect for the beauty and uses of birds;
- begin to notice the many varieties of birds and the uniqueness of each;
- learn the names of birds near their community;
- understand that many birds come north only for the summer;
- learn to respect and protect bird nests, and appreciate that birds are very protective of their nests.

##### *Knowledge and Traditions*

- If you found a small bird's eggs, you marked its location and ensured its safety.
- Children played with duck feet.
- Children played with the wind pipe of a swan to make honking sounds like them.
- There are cardboard box traps that children used to catch small birds.
- Boys were encouraged to make bird calls.
- Pet ravens can be very protective of your house.
- Baby gulls make good pets.
- The jaeger will swoop down if you get too close to its eggs.
- Snow Buntings indicate spring.

##### *Key Experiences/Activities*

- Have students learn stories about birds from their families and share them in class.
- Go for walks around the community when the birds are returning in the spring. How many different kinds of birds can you see? Keep track as the spring progresses.
- Make a mural of birds seen near the community. Include their names and how the birds are used.
- Ask students to list all the birds that they see in summer. Do the same for winter. Talk about where birds go in the winter and why.
- Have students draw and write a story about their favourite bird, and tell the class why it is their favourite.
- Show a slide or a picture of a bird that occurs near your community. Have students list adjectives that describe it. What does it have in common with all birds? What makes it different from other birds? Have students use the adjectives to write poems or songs.

#### Grades 4 - 6

##### *Objectives*

Students will:

- discuss Inuit beliefs about birds.
- understand that migratory birds are appreciated and used also by people in the south.
- be able to identify birds near their community.
- learn about the diets, habitat, migration routes, life cycles, and habits of several species of small, large, migratory, and year-round-resident birds;
- begin to learn traditional and modern hunting methods and uses for ducks and geese;
- learn about the migration routes and wintering areas of birds that spend summers in the north.

##### *Knowledge and Traditions*

- Small birds were used as targets to perfect and practice hunting and aiming skills.
- People used to collect eggs in groups.
- People still like to eat fat seagull.
- Gull eggs are a delicacy.
- The ptarmigan stomach and intestines are a delicacy eaten raw.
- Duck feet in some communities are considered to be a delicacy.
- King Eider duck's nose is considered a delicacy.
- The crane can be vicious. Do not try to take their eggs since some believe they can kill by hitting you on a certain part of your body.

##### *Key Experiences/Activities*

- Divide the class into small groups. Assign each group a bird to learn about. Ask them to collect all the information they can about this bird: what it eats, where it spends the winter, its habitats, nest, life cycle, uses, as well as stories and beliefs about it. Have each group present their bird to the class in an original way. You might invite families or elders to the presentations.
- Have students write stories about hunting birds with their families. How are the birds hunted? How are they used? Ask students to tell about their part in the hunt.
- As a class make flash cards of birds found near the community. Have students use the cards to practice identifying and naming the birds.
- Using birds shot by family members for food, e.g. ducks, geese, ptarmigan (birds stored in a freezer are OK), examine the digestive path of a bird. What has it been eating? Ask an elder to name the parts and their traditional uses.

# Birds

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- understand why birds migrate and why they come north to breed, and appreciate the importance of the north for breeding birds;
- learn about the adaptations of birds that spend winter in the north;
- become familiar with Inuit and scientific approaches to classifying and categorizing birds;
- learn and understand the Inuit and government rules and regulations for hunting waterfowl;
- continue learning about traditional ways of hunting and using birds.

#### *Knowledge and Traditions*

- The ptarmigan's red eyebrow was used for decorating the atigi.
- If the embryo is just starting to grow, it will still be eaten so as not to waste it.
- Crane or loon heads were used for dancing head-gear. The Inuvialuit have beautiful goose dances.
- In Sanikiluaq, they make beautiful duck clothing.
- Bird tendons were used as alternate thread.
- Feathers were used as dusters, to wipe hands with and as brooms among other uses.
- Five string bola were used for catching birds.
- Bird feathers were attached to arrows.
- The arrival of Arctic Terns mean it is summer.

#### *Key Experiences/Activities*

- Invite an elder to talk about traditional methods of hunting birds.
- For each local bird the class sees/learns about, find out what countries it migrates through and winters in. On a globe or world map, put pins in those countries and connect them with string to your community. Birds connect the world!
- Compare a bird that spends winter in the north with one that migrates. How are they physically different? Discuss the adaptations of birds that spend winter in the north.
- Have the class research the number of geese that breed in the NWT. What percent of the North American goose populations does this represent? Why is the north such a good place for breeding geese? Consider habitat, food, environmental factors.
- Have students keep a bird hunting journal describing their experiences hunting, and what they learned about birds and about themselves.

### Grades 10 - 12

#### *Objectives*

Students will:

- appreciate that many factors influence the conservation of birds;
- learn about the international regulations that protect migratory birds;
- study the issue of spring hunting of waterfowl in the north;
- learn and appreciate traditional Inuit approaches to conservation of birds;
- understand the threats to birds in the south (e.g. habitat loss, pollution) and the implications for the north.

#### *Knowledge and Traditions*

- Loon skins were used as bags to keep things dry or to carry embers while travelling.
- The large bone on the swan's wing was used as the stem of a pipe.
- The bills and other parts of birds were often used as talismans or amulets.
- Women's work bags were sewn from the skin of swan's feet. Windows were made from the gullet.
- Inuit made nets of willows to catch birds.
- Loon and swan skins were used as bags for rope when whale hunting.

#### *Key Experiences/Activities*

- Find out where a bird that breeds locally and is important to Inuit spends the winter. Learn about that country (or region): its geography, climate, culture, political issues, and especially environmental issues. How might any or all of these affect the birds? What impacts might those effects have in the NWT. Emphasize the far-reaching effects of local actions on shared resources such as birds.
- As a class, study the issue of spring waterfowl hunting in the north. Learn the perspectives of different groups e.g. local elders; the Canadian, U.S., and NWT governments; southern hunting groups. Ask students how they feel. Network with Inuit communities in Alaska who have dealt with similar issues.
- If possible, make some of the traditional implements, ornaments and other things from parts of birds.

## Bugs

*Qaput (natural oil slick) that comes out from a mossy area is rubbed on the face and hands as insect repellent.*



Photo: T. Macintosh

Stencil print by Kalvak, Holman Island

### How Mosquitos Were Made

Long before the earth was covered with water, there lived a firece giant that everyone was afraid of. The Inuit hoped that someone would come to help them fight the giant.

One day a handsome man arrived, dressed in fine caribou skins. He looked so strong and brave that everyone knew this man would surely help them.

The Inuit told him about the giant. At once, the young man took his bow and arrows and went to the distant caves where the giant lived. Inside the cave, he looked for a place to hide until the giant came home. Suddenly, there were heavy foot steps on the rocks outside the cave. Quickly, he hid under some caribou skins on the bed. The giant came into the house. His head touched the ceiling, and the earth shook as he walked.

"I smell a man," shouted the giant. "I will get my club to fight him." While the giant was outside the house looking for his club, the giant's son came into the house. The young man jumped out from under the caribou skin. The giant's son was the same size as any other boy and, seeing the brave and strong man in from of him, he was very much afraid.

The man pointed his bow and arrow at the boy and said, "Tell me how to beat your father. If you don't tell me, I will shoot this arrow."

"Just shoot at his heel." said the frightened boy.

At that moment, the giant came into his house. Before the giant cold raise his club, the man shot him in the heel. The giant fell onto his face, and very slowly became smaller and smaller.

The young man dragged the giant out of the house, then hurried to the village to tell the good news. Everyone in the village wanted to see the giant who was not really a giant anymore. They all ran towards the distant caves.

As they came near the giant's house, they could see smoke. When they got nearer they could see the giant was on fire. His son stood ready to run. "It was the sun. Look!"

They looked at the fire, then at the sun. There, flying from the fire were thousands and thousands of mosquitos. The giant, as he burned, was being changed into mosquitos.



## Bugs

### *Rationale*

Although bugs are generally considered to be a nuisance or “scary” by Inuit, they have a place in the environment just like everything else. Things that fly, crawl or swim have fascinated children of all cultures. It is especially interesting for them when there are stories to go with the bugs they are learning about. In many cases up North, children see bugs for only a short period of time during the school year. When the ponds and streams are free of ice in the spring, or early fall, your class can study what kinds of bugs live in the water. They can also study flying or crawling bugs whenever they are visible as well as bugs that attach themselves to water or land animals.

### *Values*

- Bugs are not to be treated cruelly.
- Bugs are part of the life cycle, so they must be respected.
- There are many living creatures that depend on bugs for survival.
- The bugs in the north have adapted to their environment.
- Bugs are survivors.

### *Beliefs*

- Killing a spider will cause rain or fog.
- Inuit believe bee’s stingers carry sickness.
- The little red spider can go in your ear.
- Put a spider underneath your daughter’s fingernail and she will learn to sew quickly and neatly like the spider.
- Orphans are believed to be susceptible to lice because a spirit in the form of lice comes to take care of them.
- When a small red spider comes down in the middle of your tent, it means there is an animal close by that you can hunt.
- Do not abuse bugs or they will get to you in your grave or will always bother you.
- A red fly that eats mosquitoes is rubbed over a baby to ensure immunity to mosquito bites.
- If you rub Tuktuujait on your child’s cheek, he will become a great caribou hunter.

### *Major Understandings*

- There are many different kinds of bug eggs.
- All bugs need to eat.
- Bugs lay eggs in the fall and they hatch when it gets warm enough.
- Bugs are part of the cycle of life.
- Some bugs live or hatch in water.
- People say different insects are appearing more and more in the North.
- Food is to be properly taken care of, especially in the summer because of parasites.
- Some insects, e.g. the house fly and the butterfly, go through different stages of life.

### *Attitudes*

Students will be encouraged to:

- tolerate and not be afraid of bugs;
- understand that bugs play an important role in the environment;
- appreciate that bugs have completely adapted to their particular environment.

## Bugs

### CYCLE OF LIFE

### CYCLE OF SEASONS

### CIRCLE OF BELONGING

#### Grades K - 3

##### *Objectives*

Students will:

- hear stories about bugs;
- begin to notice the different kinds of bugs that live around their community and whether they fly, swim, or crawl;
- appreciate bugs as part of the cycle of life;
- learn that bugs are not to be treated cruelly;
- learn the names of common bugs;
- begin to tolerate and not be afraid of bugs;
- understand why some insects bite people.

##### *Knowledge and Traditions*

- Mosquitos drive the caribou to the coast.
- The tuktuuyat/tukturjuk is respected by the Inuit because they will not harm you.
- Parents would tell children not to be in the water too long or the putuguqsium bug would get you.
- Butterflies were seen as pets or toys.
- The bugs belonging to the earth are called nunaup kumangit (the earth's bugs).
- The warble fly lay their eggs on the caribou.
- A spider hole is called a hittaq/sittaq.

##### *Key Experiences/Activities*

- Take your students for a walk. Talk about the different bugs they see. Later, have them draw or write what they saw.
- Take your students near a pond, river or the sea. Have them record what kinds of bugs they see in the air and in water.
- Have the students collect books about bugs. While looking through the books, have them identify questions they might have. Later, put these questions on chart paper and then plan with your students where they might find the answers.
- Have your students study the life cycle of a fly, mosquito, butterfly or a bee. What do they eat? What do they look like? How long do they live?
- Have your students learn the names of all the bugs that they see around the community.
- Invite an elder to tell stories about bugs. Encourage the children to ask questions.

#### Grades 4 - 6

##### *Objectives*

Students will:

- discuss beliefs about bugs;
- learn to identify common bugs that are helpful or harmful to humans and other animals;
- learn about the diets, habitats, and behaviour of several kinds of bugs, including some that crawl on land, some that fly, and some that swim;
- learn traditional methods for keeping bugs away and for treating bug bites and stings;
- learn how to care for food to prevent parasites;
- study the physical structure of different types of bugs and learn how they are similar or different.

##### *Knowledge and Traditions*

- A maggot is sneezed out by caribou.
- A big black spider carries her eggs on her back and when the eggs hatch, lots of brown babies cover her.
- The insect most feared by the Inuit is the bumble bee.
- When spring arrives, the first bumble bees and mosquitos appear to be very large.
- The longer hair of a musk ox was used to swat mosquitos away.
- The tip of a feather with the barbs removed was used to remove lice.

##### *Key Experiences/Activities*

- Invite an elder to tell students about bugs. Ask the elder to tell stories of bugs as well. Later, have a discussion with the students on what they learned and how they felt about the stories. Have the students analyze their feelings about bugs.
- Have the students write fictional stories of why they think the bugs are the way they are.
- Have the students research how bugs have adapted to the North, and how they depend on animals for survival.
- Have the students research the proper care of meat in their community to prevent bugs from destroying the meat.
- Have the students write and illustrate their funniest incident with bugs. Make this into a classroom book.
- Have your students "adopt a bug". They can learn everything about this bug from the time it is born until it dies.
- Have your students research how to deal with parasitic bugs. What measures can they take?

# Bugs

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

Grades 7 - 9

### *Objectives*

Students will:

- understand and appreciate how different bugs have adapted to their environment.
- find out how bugs survive northern winters.
- appreciate the relationships between caribou and insects.
- learn about insects that are parasites of plants or animals.
- become familiar with Inuit and scientific approaches to categorizing insects.

### *Knowledge and Traditions*

- The house fly goes through three stages: niviuvak, qupaupak and qupilruq.
- Heather was burned to keep mosquitos away.
- Hunters used loon skins to keep mosquitos away while walking inland.
- A kiasik (caribou shoulder blade bone) was used as a fly swatter.

### *Key Experiences/Activities*

- Have your students record stories of funny events with bugs. They can interview their family or friends. Perhaps their stories can be recorded and aired over the radio.
- Have your students learn about the different bugs that live in their region. How do they survive the winters? What do they eat? Where do they live? The students can perhaps write to a school in another region asking for information about bugs.
- Have your students study a parasitic bug. What do they do to their hosts? How do they attach themselves? What stages do they go through?
- Have your students research parasites on caribou. What do they do to the caribou? How do the caribou deal with them? What do they do to their skins?
- Have your students categorize bugs, either how they look, what they do, where they live or the stages they go through. Your students can decide on various approaches to categorizing.

Grades 10 - 12

### *Objectives*

Students will:

- learn the life cycles, and names for different stages, of several kinds of bugs including some that fly, some that swim, and some that crawl.
- learn how some common bugs reproduce.
- understand why there are so many flying insects in the north.
- learn about the role of bugs in the food chains of northern animals.

### *Knowledge and Traditions*

- Moss or the leaves of black berries is burned to keep bugs away.
- Mud can be smeared on to soothe insect bites.
- Certain leaves are chewed and placed on bee or wasp stings.
- A hole will be dug in the ground for dogs to keep them away from mosquito swarms.
- The blackflies appear when the caribou becomes too hot.
- Qaput (natural oil slick) that comes out from a mossy area is rubbed on the face and hands as insect repellent.

### *Key Experiences/Activities*

- Have the students write about how they feel about bugs. They can also record how others feel about them. Do people believe that bugs have uses? What are the beliefs about bugs?
- Have the students study traditional and scientific knowledge of bugs.
- Have the students study life cycles of bugs in their area. How are they useful? How are they harmful? How have they adapted?
- Have your students try some of the traditional methods of keeping bugs away. What was the most effective?
- Have your students research traditional stories on how bugs came to be. Have them compare with other cultures.

## Plants

*Twigs were wrapped around caribou skins to keep them dry for later use.*



Photo: A. Gunn

Purple mountain saxifrage

### Some Arctic Plant Information

#### **Mountain Avens**

On June 7, 1959, the Territorial Council of the Northwest Territories adopted the Mountain Avens as the official floral emblem of the N.W.T. The Mountain Avens grows abundantly in the Eastern and Central Arctic Regions and in some parts of the Mackenzie River area. It is found in open, well drained ground, especially on high or rocky areas.

#### **Purple Saxifrage**

The purple saxifrage is the most common flower of the northern region and is considered to be the hardiest of the seed producing plants of the Arctic. The leaves remain green throughout the year and are eaten by ptarmigan, northern grouse and lemmings. The flowers are gathered by Inuit and traditionally eaten with seal oil.

#### **Mountain Sorrel (qunguliq)**

The leaves, flowers and stems are considered to be delicious and are enjoyed by many people in the summer. They were usually eaten raw and the leaves were sometimes rubbed together to make them more tart. The leaves, as well as the roots, are also eaten by animals and birds.

#### **Arctic Cotton**

Arctic cotton grows on wet marshy areas. Traditionally, they were gathered as wicks for qulliit (stone lamps) and as mattress stuffing. The whole family would spend time throughout the summer and early fall to gather enough for winter use.

#### **Woolly Lousewort**

The flowers can be picked off and eaten. The roots are tasty and are sometimes held over a fire to be cooked and then eaten.



## Plants

### *Rationale*

Plants indicate that spring and warmth has arrived. It meant that Inuit could supplement their diet with plants. Inuit learned to use plants for many things, not just for medicine. Leaves, flowers, berries and roots were eaten. Moss and arctic cotton were valuable as fuel. Moss could be used as a mattress and for diapers, sod to build a home or runners for a qamutik. Many people are interested in how plants were used traditionally, and elders and others who have the knowledge about them are willing to share this knowledge with students. This topic could focus on the traditional uses of plants, traditional names of plants, and adaptation of plants.

### *Values*

- Passing on knowledge of the uses of plants was important.
- The Inuit knew the importance of plants for the animals as well as for people.
- The growth of plants in the spring was welcomed with gladness.
- Plants were one of the things that were used as medicine and healing.
- Plants in the north take a long time to grow if they and the land they live on has been damaged.
- Plants are survivors.

### *Beliefs*

- If the environment, the land and everything that lives on the land is treated with respect and sensitivity, it will provide for you and help you.

### *Major Understandings*

- Plants are used for medicine, food and dye.
- Plants clean the environment.
- Certain plants grow in certain areas.
- Some plants can survive drought.
- Twigs and roots are important for many reasons.
- Plants have adapted to the climate in the tundra.
- Leave enough moss and lichen for the caribou.
- Some plants grow close to the ground.

### *Attitudes*

Students will be encouraged to:

- be aware that changes people make to the environment can have an effect on plants.
- appreciate that plants in the tundra take a long time to grow.
- know the uses of plants as food, for medicine, as fuel, as mattresses as well as for other uses.

# Plants

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades K - 3

#### *Objectives*

Students will:

- hear stories about plants and their uses.
- appreciate the many uses of plants and the importance of plants to the Inuit.
- begin to learn the names of local plants traditionally used by Inuit.
- begin to respect plants as givers of life.
- begin to notice the many varieties of plants and the uniqueness of each.
- understand that plants depend on the sun.
- learn where different types of plants grow near the community.

#### *Knowledge and Traditions*

- Moss was used for diapers, mattresses and as fire starter.
- Arctic cotton was used as a wick on a qulliq (stone lamp).
- Twigs were used to make drying racks over the qulliq.

#### *Key Experiences/Activities*

- Invite elders to tell stories about plants and their importance to the Inuit. Have students make gifts from plants and give them to the elders.
- Have students find out from their families how they use/d plants. Start a class list of the various uses. How many can students come up with? Which are most common.
- Create a class celebration to thank the plants for their gifts. Invite others to join. Remember to thank the sun for its gifts to the plants!
- Have students write stories about their favourite plants.
- Make a display of plants, their names, and their traditional uses.
- Take "plant walks" around the community. Notice the different types of plants and where they grow. Look at plants that grow on rock, in or near water, in tundra areas etc.

### Grades 4 - 6

#### *Objectives*

Students will:

- understand why certain plants only grow in certain areas.
- begin to learn which plants were used for various purposes.
- be able to identify common plants used traditionally by Inuit.
- learn what plants need in order to grow.
- learn the names for different parts of a plant.
- learn the proper ways to collect plants for various uses and to ensure there will still be enough for other animals.

#### *Knowledge and Traditions*

- Roots were used as ropes.
- Arctic cotton was used as a wick on a qulliq.
- Twigs were used as mats for caribou skins and moss mattresses.
- Twigs were used for drying caribou meat and fish.

#### *Key Experiences/Activities*

- Find out how to make a plant press and start one in your class. Teach students how to collect plants to be pressed.
- Using pressed plants or pictures, have the class make a book of local plants with their names and traditional uses. Present it to the school library.
- Go on a plant-collecting trip with an elder or other knowledgeable person. Learn how to collect plants with care and respect for the plant and other users. Ask the elder to teach the names for different parts of the plant and to explain their uses.
- Choose a small area near the school where there are a number of different plants and draw a map of the plants that grow there. Have students describe the habitat of each plant.
- Have students collect recipes for local plants from people in the community. Make a plant cookbook. Make some of the recipes and share them.

# Plants

## CYCLE OF LIFE

## CYCLE OF SEASONS

## CIRCLE OF BELONGING

### Grades 7 - 9

#### *Objectives*

Students will:

- continue to learn how to collect and use plants for medicine and healing, food, fuel, and household uses.
- appreciate how plants have adapted to the northern environment.
- become familiar with Inuit and scientific approaches to classifying plants.
- appreciate that all animals depend on plants for their survival.
- learn about water plants and their importance to animals that live in water.

#### *Knowledge and Traditions*

- Roots were used as ropes.
- Willows are burned to smoke meat and fish.
- Twigs were wrapped around caribou skins to keep them dry for later use.
- Willow leaves were chewed and placed on bee stings.

#### *Key Experiences/Activities*

- Have students pretend they are going out on the land in the summer with no supplies. Ask them to write a story describing how they would survive. Share the stories in class. How often did students rely on plants? Would it help if they knew more about plants and their uses?
- Have students learn how to use roots as ropes.
- Ask elders to talk to the class about plants used for medicine and healing.
- Take a trip to a local pond or lake and observe the plants growing in or near the water. How do they differ from land plants? Why are they important to the body of water and the animals and insects that live there?
- Survey the class: How much of our oxygen comes from plants?!

### Grades 10 - 12

#### *Objectives*

Students will:

- appreciate the importance of plants as the base of all food chains.
- appreciate the dependence of caribou on lichens.
- learn about the unique characteristics of lichens and how lichens grow.
- understand why plants take a long time to grow in the north.
- understand how the actions of people can affect the survival of plants.

#### *Knowledge and Traditions*

- Soil or sod was used to make sliders on a gamutik.
- Sod was used to make a qarmaq (sod house).
- Moss (maniq) was used to soak oil and preserved for the winter.
- For soft skin, rub aqpiit on your face, then wash off.

#### *Key Experiences/Activities*

- Collect different kinds of lichens (carefully and sparingly) and look at them under the microscopes. Have the class research what makes lichens unique.
- Find out the names for different kind of lichens.
- Make dyes out of lichens (see "Science Alive" p. 115).
- Choose several plants important to Inuit and have students list their uses. Have them think of other users (animals, insects) and how they use the same plants. Show this in a mural.
- Have students diagram the food chains of several animals important to the Inuit. What forms the base of each food chain?