

# ***Sound and Light***

## ***An Integrated Science Learning Unit for Yukon Grade 4 Students***



March 2012

## ***Acknowledgments***

In 2008, the Yukon First Nation Education Advisory Committee proposed several goals and priorities for education in the Yukon. Central priorities included the development of curriculum and resources that integrate into curricula, First Nations content, perspectives, values, knowledge *and ways of teaching and learning*. This resource provides teachers with the support for providing learning experiences that allow for learning to be grounded in the heritage of northern students including culturally preferred learning styles rather than just learning about their heritage.

The development of this resource for teachers and students in the northern Yukon has been made possible through the granting agency Social Sciences and Humanities Research Council. Their support has ensured that northern students are provided with the opportunity to learn about their heritage through means responsive to their learning style preferences, especially when they study core curriculum areas such as science. The development of this resource has also been made possible through the support of the Tr'ondëk Hwëch'in community of Dawson City. The elders and community members have given their time and knowledge to ensure that their experiences can be recorded and incorporated into learning activities valuable for their community's children.

As well, the school community of Robert Service School, especially the teachers of the Intermediate grades is thanked for its support in the development of the learning activities outlined in this resource.

Contact details:

Dr. Brian Lewthwaite  
Faculty of Education  
University of Manitoba

## ***Guiding Principles of the Unit***

- Draw upon teaching orientations that are identified as culturally located practices.
- Affirm cultural competencies honored by the local community.
- Provide two-way learning experiences by integrating traditional knowledge, beliefs and values and contemporary scientific knowledge, processes and attitudes.
- Use traditional and contemporary cultural examples as contexts for student learning.
- Include the local community and its people in students' learning opportunities, especially in the use of narratives including local people.
- Foster Han language development where possible.
- Use diagnostic and formative assessment to inform planning and teaching and monitor student learning.
- Engage students by starting lessons by providing first-hand experiences for students or drawing upon common experience.
- When using story to engage students, use the interrupted-story-line as a vehicle to prompt consideration and first-hand investigations.
- Deliberately promote scientific attitudes of mind (curiosity, problem-solving, working to end) student through thoughtful independent consideration of questions and challenges posed.
- Move from the experiential, first-hand experiences to the psychological; that is, after providing concrete experiences assist students in making sense of experiences by using purposeful strategies to promote understanding such as role plays, illustrations and analogies.
- Assist students in their consolidation of ideas only as an extension of the initial experiential and psychological learning experiences.
- Provide opportunities for student-initiated and directed investigations.
- Provide opportunity for students to make connections among science and all other learning areas.
- Foster student independence, creativity and curiosity by providing opportunity for students' ideas and questions and follow-up opportunities for problem-solving and investigation.
- Provide students the opportunity to make connections between what they are learning and career opportunities specific to the local context.

## ***Cross-Curricular Applications***

This unit is developed to reinforce the learning outcomes of all science units experienced during Grade 4. These include:

### ***Life Science: Habitats and Communities***

*It is expected that students will:*

- compare the structures and behaviours of local animals and plants in different habitats and communities
- analyse simple food chains
- demonstrate awareness of the Aboriginal concept of respect for the environment
- determine how personal choices and actions have environmental consequences

### ***Physical Science: Sound and Light***

*It is expected that students will:*

- identify sources of light and sound
- explain properties of light (e.g., travels in a straight path, can be reflected)
- explain properties of sound (e.g., travels in waves, travels in all directions)

### ***Earth and Space Science: Weather***

*It is expected that students will:*

- measure weather in terms of temperature, precipitation, cloud cover, wind speed and direction
- analyse impacts of weather on living and non-living things

The unit is also developed to reinforce or address the learning outcomes of the Social Studies curriculum of British Columbia (2005). These include:

### ***Society and Culture:***

*It is expected that students will:*

- identify and clarify a problem, issue, or inquiry
- locate and record information from a variety of sources
- identify alternative interpretations from specific historical and contemporary sources
- assess at least two perspectives on a problem or an issue
- organize information into a presentation with a main idea and supporting details
- design and implement strategies to address school problems or projects

***Politics and Law:***

*It is expected that students will:*

- describe how people's basic needs are met in a variety of cultures
- demonstrate understanding of timelines
- demonstrate awareness and appreciation of various Aboriginal cultures in Canada
- demonstrate understanding of contributions of Aboriginal people to Canadian society

***Economy and Technology:***

*It is expected that students will:*

- compare the "discovery" and "exploration" of North America from European and Aboriginal peoples' perspectives
- describe the structure and functions of the BC provincial government
- describe a traditional and a contemporary Aboriginal form of government

***Environment:***

*It is expected that students will:*

- compare bartering to a monetary system of exchange
- demonstrate understanding of factors that influenced early European exploration of North America
- describe traditional technology used by Aboriginal people in Canada
- describe technology used in exploration
- identify economic and technological exchanges between explorers and Aboriginal people
- evaluate the influence of mass media on stereotyping

The emphasis in Social Studies on the validation of Aboriginal Cultures and Continuity and Change in Society are emphasized in this unit. As students are engaged in science, they will also be engaged in social studies learning. They will also be developing oral and written language and numeracy skills specific to Grade 4. The unit has strong connections to experiencing sound and light within the northern Yukon environment, both within an historical and contemporary social context.

Students are encouraged to explore the characteristics and properties of light and sound within their immediate context, especially through the stories and accounts of persons from the community. Natural sources of light such as the sun, moon, and the northern lights and natural sound sources such as the human voice and other animal sounds are only some areas that students can develop a rich understanding of sound and greater sense of their own culture.

There are obvious connections to social change and personal health and well-being. Teachers are encouraged to make reference to how technology associated with light and sound has changed over time and the importance of a healthy lifestyle. The activities suggested are starting points. Broaden the focus by adding stories and activities of your own or from the experiential base of your community.



## ***Conceptual Ideas and Progression***

The key learning outcomes for Grade 4 Science include:

- identify sources of light and sound
- explain properties of light (e.g., travels in a straight path, can be reflected)
- explain properties of sound (e.g., travels in waves, travels in all directions)

For the most part, the activities and the conceptual and skill development embedded within the activities that follow are sequential. Early learning experiences and ideas primarily focus on experiencing and communicating these experiences. More complex experiences focus on understanding and investigating these experiences and appreciating applications of this understanding to their students' everyday world. Some suggested learning ideas include the following:

- There are sounds and light sources all around us.
- The sounds we hear and light sources we see have names.
- The sounds and lights in and around our community often change from location to location and over time, hour to hour, day to day and season to season and year to year.
- Sounds and light sources vary in many ways and these characteristics of sounds allow us to describe and categorize sounds.
- Some of these light sources and sounds we hear are very important to us.
- For sounds to be made there needs to be something moving. For light to be produced most often there needs to be electricity or something burning.
- Sound and light travels outwards from its source.
- Sounds are detected by our ears and interpreted in our brain. Light is detected by our eyes and interpreted in our brain

- We can measure sound and light.
- Pitch and volume are important characteristics of sound. Intensity is an important characteristic of light.
- Sound travels better through denser objects, including colder air rather than warmer mediums.
- Some materials are better conductors of sounds and light than others
- Some materials reflect sound and light; some materials absorb sound and/or transmit light.
- There are a variety of ways we make effort to change pitch and volume of sounds.
- If we can concentrate or collect sound or light waves, we can amplify sound or intensify light.
- Sounds and light sources and the way sounds are created and communicated in our community have changed.
- We make use of technologies associated with sound and light.
- We can communicate with and without sounds and light.
- Our hearing and sight can be damaged.
- Animals can hear and create sounds. They are influenced by some sounds more than others.

[http://library.thinkquest.org/05aug/01046/images/use/asl\\_clip\\_image002.jpg](http://library.thinkquest.org/05aug/01046/images/use/asl_clip_image002.jpg)





## *Skills Development*

This unit emphasizes that the learning of science ideas is inextricably linked to the development of the processes of science. As asserted by British Columbia Science Grade 4 (2005), the legislated curriculum for Yukon schools, science experiences should provide opportunity for the development of conceptual understanding within the context of relevant investigative experiences. Although individual scientific process skills may be emphasized in specific activities, they are to be supported more holistically in teacher-facilitated or student-directed inquiry. The skills to be developed are expected to be appropriate to the level of the learner. These skills and a typical developmental sequence are outlined in detail in the Science Grade 4 (2005) guide.

### ***Kindergarten***

use the five senses to make observations  
share with others information obtained by observing

### ***Grade 1***

communicate their observations, experiences, and thinking in a variety of ways (e.g., verbally, pictorially, graphically)  
classify objects, events, and organisms

### ***Grade 2***

use their senses to interpret observations  
infer the probable outcome of an event or behaviour based on observations

### ***Grade 3***

ask questions that foster investigations and explorations relevant to the content  
measure objects and events

### ***Grade 4***

make predictions, supported by reasons and relevant to the content  
use data from investigations to recognize patterns and relationships and reach conclusions

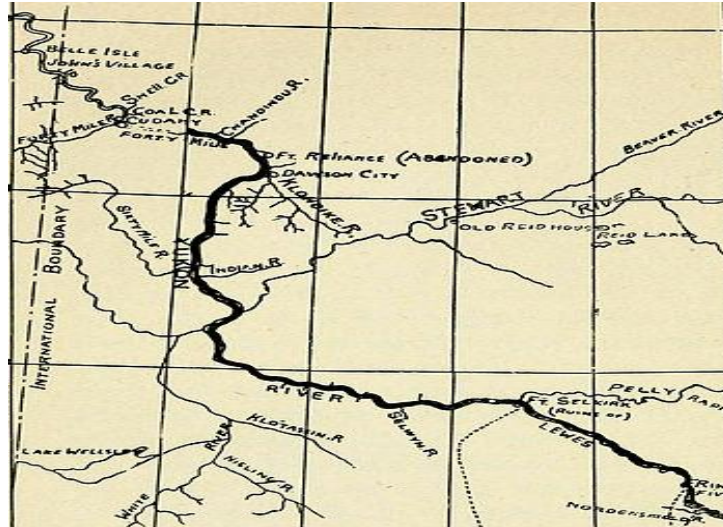
These skills involve coordination between cognitive and psychomotor skills. Handling and manipulating equipment require not just the physical ability to perform a task but also the intellect to know how to measure or observe accurately. It is anticipated that by the end of intermediate school, a student might be able to, with assistance,

conduct a scientific investigation. This unit provides opportunities for students to work physically and cognitively towards this end.

There is no universal list of scientific process skills. Those identified in this curriculum are not intended to be a linear scope and sequence; instead, they suggest multiple ways in which learning science can be explored. At each grade level, two processes are introduced and then reinforced with the curriculum content in the subsequent grades; but teachers are expected to involve all of the skills their students are capable of using.

Process skills are best learned in hands-on activities where students engage in a problem-solving task while doing science. The hands-on model of learning science allows students to construct meaningful connections within the brain. In young children, process skills can be found in the natural practice of manipulating materials while asking questions and being curious. The names of the skills can be used and reinforced by teachers as students use and learn to apply these skills to science activities. The science process names will become familiar to students, enabling them to use the correct vocabulary when they explain their involvement in science and technology inquiries.

**The Sounds of Winter:** *The following is a story told by Frank Ahearn. Frank is originally from the Maritimes but lived in Dawson for many years, spending most winters trapping on the upper Klondike River.*



Before there were any roads in the Yukon, people got around by following the rivers. In summer, people travelled the rivers by boat or raft. In winter, we travelled by foot or dog team. We sometimes just think of the Yukon River and Klondike River, but there are many, many rivers that people travelled on.

I spent most winters trapping on the upper Klondike River. This is an area not far from the Tombstone Mountains. The cabin we stayed in was along the Klondike River. We trapped for marten, lynx and wolves. The trapline followed the Klondike River and some of the creeks that flowed into the Klondike.



The winter time was a very quiet time. There was only the sound of ravens and sometimes the wind. On cold days when you chopped and cut wood, the sounds

would travel for miles. We did not get much wind. The only sounds you heard were when the dogs were excited to be getting fed or going out on the trapline. Sometimes the dogs would go crazy and bark and bark. This usually meant there was an animal near the cabin.

I recall one winter that the dogs were barking loudly. They were in a frenzy. They were disturbed by something.

I looked across the frozen river and there was a pack of wolves on the other side. There were many wolves, maybe about ten or fifteen. They watched the camp closely and silently. They were not afraid of the sounds being made by the dogs.

In the evening you would hear the wolves howling in the distance and the dogs would bark more and more. It was like the wolves were taunting and teasing the dogs. I would watch them carefully as they seemed to not be afraid of humans. I had my gun handy in case they attacked, because I knew they could. But, they never came across the river. They would just stay on the other side of the river watching the camp.

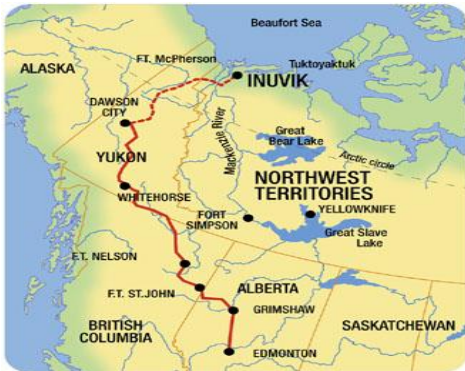


The wolves would come by the camp on the opposite side of the river often. Each time the dogs would get anxious and start yelping. I would watch the wolves because I did not know why they returned each day.

Then, one night the dogs were more excited than usual. It was a moonlit night. I looked out the window of the cabin and saw a few of the wolves coming across the river towards the cabin. The dogs were going crazy. They were pulling on their chains trying to get loose. I grabbed my gun and went outside. Just as I got outside, one of the dogs broke free of and took off towards the river towards the wolves. I shot the gun into the air. Once, twice, three times I shot. CRACK! CRACK! CRACK! The sound from the gun thundered and echoed through the valley. It was so loud. The dog stopped immediately. The wolves turned and took off into the stillness of the night. I don't know who was more frightened – the wolves or the dog! I saw the wolf pack again, but they never came back across the river after that.

**Hearing Lice:** *The following story is an adaptation of an interview with Alfred Kendi of Fort McPherson. Alfred worked on the Dempster Highway in the Yukon and NWT when it was being built in the 1960s and 70s.*

My older brother, father and I were hunting between Dawson City and Fort McPherson in the Eagle Plains area. This was in the winter, a long time before the Dempster Highway was built.



We had left the sled and dogs behind in the early morning so we could get close to the caribou. We followed caribou tracks. We walked a long way before we saw caribou.



My father killed a caribou in the early afternoon and we had to back pack the meat to our sled and it was a long ways to carry the meat. My father and brother were going to carry most of the meat and I had to carry some too. My father told me to back pack the rump of the caribou. It was heavy and I was concerned I might not be able to carry it. How could I carry such heavy meat?

My father made a head band for each of us from a sack to lighten the burden. I could lessen the load by tying a rope to the rump on both sides and then running the rope to the head band across my forehead. Another rope went around my shoulder. When I leaned forward the weight of the meat was on my back. It made carrying the caribou rump easier.

My brother knew the caribou was heavy and I would get tired and lag behind. He then told me something that worried me. He told me there were lice in the caribou hair and they would crawl off the caribou to get on the hair of my head if I carried the caribou rump too slowly. I could not walk slowly. I was determined to go fast. Even though I was determined to go fast, the caribou was heavy on my back, head and shoulders and I did carry the caribou slowly. I stopped many times. I was getting further and further behind and I was discouraged. I couldn't see my brother and father I was so far behind. I could see their tracks in the snow.

I decided to tighten the head band and start again. By this time, I could see in the distance my older brother and father. They had already reached the sled. I pressed on as quickly as I could. I started to hear sounds of lice cracking from my head band. The lice were now crawling from the caribou and getting under the headband and into my hair! They were being squashed from the pressure of the head band. I was certain that the head lice were being crushed as my burden was heavy and the head band was under a lot of pressure on my head. It scared me.

I started to run really fast to make the lice stay on the caribou like my brother said. I made it very quickly to the sled after this began to happen. As I went faster, there were more lice cracking. I ran faster and faster. I was scared. When I finally got to the sled, my brother was laughing, but I did not think it was funny. I told him that as I went faster, there were more lice in my air and the sound got louder.

I said to them that I thought the lice might all be crushed from the pressure and that because I went fast the lice might have stayed on the caribou. This did not happen. There were tears as I said this but my older brother really laughed at me. My father thought this was hilarious. I was not happy.

My father told me that the sounds I heard came from some of the woven twines on the head band snapping from the weight of the caribou. There were no lice! My father told me not to be embarrassed because he had played the same trick on my older brother when he was younger. I felt better after that.

## There are Sounds Around Us

1. Draw a picture of the story of the trapper, his dogs and wolves. Write down some of the sound words from the story beside the picture. Tell someone about your picture.



2. Did the boy really in the second story really hear lice? If not, what did he hear?

---

3. How old do you think the boy in the second story was? Alfred was 9 years old at this time. How has life changed for 9 year olds hunting caribou today?

---

4. What sounds can you hear in the classroom?

---

5. How many sounds can you hear? \_\_\_ What is the loudest? \_\_\_

6. Draw a picture of the things that are making sounds around you now. Tell someone about your picture. Which sounds are loud? Which sounds are quiet? Write 'loud' and 'soft' on the picture.



**Words That Have to Do With Sound and Light**



## The Sounds We Hear Have Names

1. Circle the sounds can you make with your **voice**?

stomping laughing whistling tapping coughing  
honking barking yawning talking crying yelling  
|

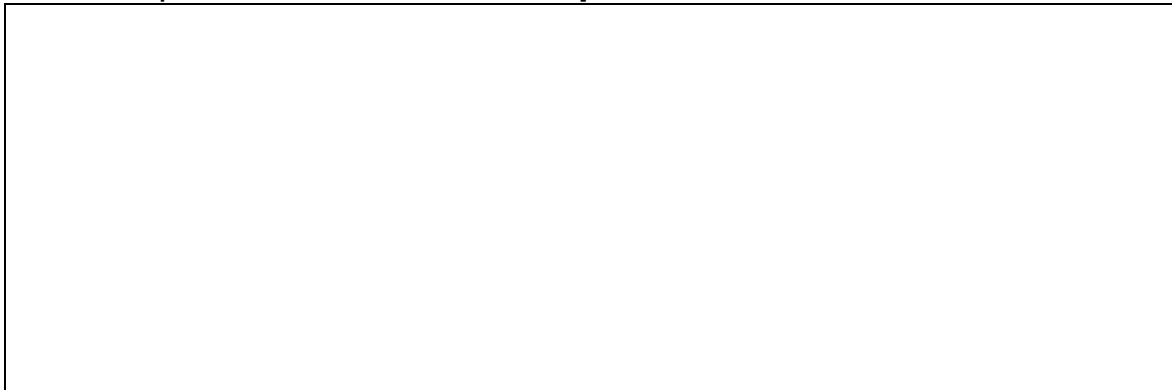
2. Circle the sounds you can make with your **feet**?

stomping laughing whistling tapping coughing

3. Circle the sounds you can make with your **hands**?

clapping snapping laughing rubbing ticking

4. Draw pictures of some **soft** or **quiet** sounds?



5. Draw pictures of sounds that are **loud**?



**I Can Make Sounds**  
**Draw a Picture of Someone...**

Stomping Feet	Yawning
Whistling	Tapping their foot
Blowing	Clapping their hands
Snapping Their Fingers	Jumping up and down
Whispering to a friend	Yelling

**Sounds I Enjoyed:** *This story is an adaptation of an account by Dick Field of Dawson City. Dick was the George Black Ferry captain and was raised in Aklavik and the Nahanni River area of the Northwest Territories.*

If there is anything that has changed in my lifetime it is mainly the sounds we hear – there were no motors when I was a child. It is different today.

I was raised in the Nahanni area of the NWT, and, at that time, the only way to get around was by dog team in winter and by raft or canoe in the summer. It was like the only sounds you heard were the sounds of dogs and ravens in winter and the sound of the river and other kinds of birds in the summer. I really liked the sound of the returning birds like the arctic terns and gulls in the spring time. The winters were quiet of sounds and then in the spring there would be the return of many sounds. You could see the eagles, arctic terns and gulls along the river especially in the morning as it starts to get warm.



In the afternoon, the eagles would be hunting and you could hear them screeching, especially in the canyons along the river. In the evening the sounds would disappear as the birds would then be inactive for the night. As the morning started again and it began to get warm, you would hear all the sounds again. I really enjoyed the sounds. I liked the sound of the eagles but not the loons.

I did not like to hear loons calling at night.

There are many stories about loons. It is said that when loons are watching an animal they make noises. They make different sounds depending on what animal they see. In the evening when we have just settled in our camp, you could hear these loons sometimes making a sound like a yelp. It is said that when they have yelped they have seen something which might be a caribou. This was important to us to hear this sound.



When they see a person it is different. Perhaps when they see some movements they will appear to be moaning. It is said that when they are making those sounds it is to be like an alarm. It could be for anything not just a person, possibly even if they saw a fox they would making that kind of a sound.

What really spooked me was the sound of wolves.

All of these sounds are still there but not as common today.

I liked some of the sounds. Some sounds I don't.

Some of the sounds were important and we recognized which ones were the most important.

## Sounds Can Change

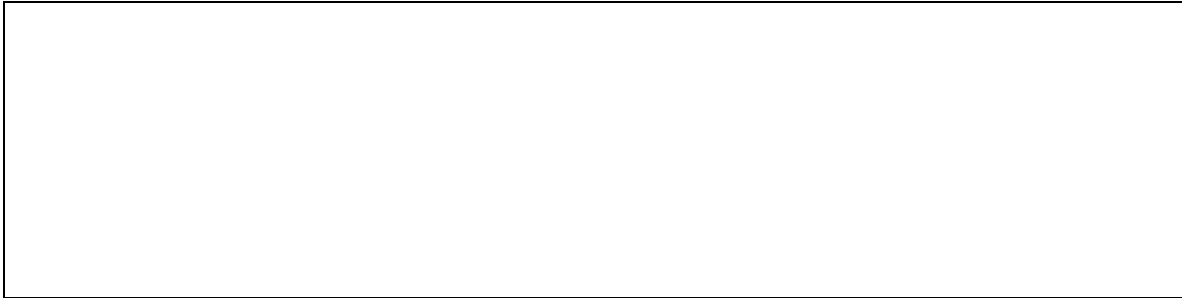
1. What sounds did you hear near the school office?

---

2. What sounds did you hear outside the gym?

---

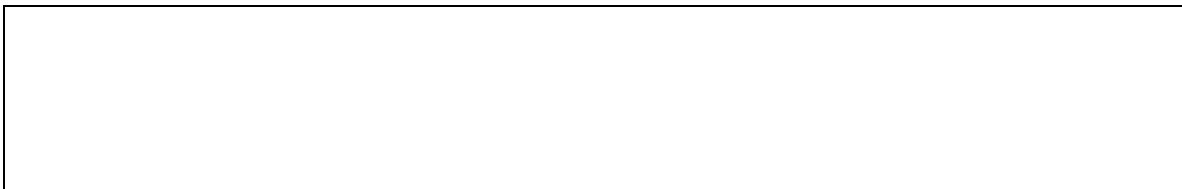
3. Draw a picture of the summer and the sounds you hear. Tell someone about your picture.



4. Draw a picture of winter and the sounds you hear. Tell someone about your picture.



6. What sounds do you **like** to hear? What sounds do you **not like** to hear? Draw a picture of these sounds and talk about your picture with a friend.



7. In his story, Dick Field tells us he thinks sounds have changed from his childhood days to now. In the space below list and draw sounds that might have been common in this area a long time ago. Also list and draw sounds that occur here now that weren't here in his day.

<u>Sounds from long ago</u>	<u>Sounds of today not here years ago</u>

8. What sounds were important to listen to? Why were some sounds important to listen to for Dick Field and his family?

---

---

9. Ask your parent or guardian what sounds they can remember from their youth that are not heard today. Make a list of these words or draw pictures below. Maybe some language words are not used; maybe there are new sounds because of changes in society and technology; maybe there have been changes because of changes in transportation.

---

---

---

Reclaiming Our Han Songs: *This story is an adaptation of an article in October 2010 Kentray Tay newsletter.*

The traditional songs of the Tr'ondek Hwech'in were all but forgotten when the northern Yukon was flooded with goldseekers during the Klondike Goldrush in the late 1800s.

At that time, Chief Isaac wanted to make sure the songs of the Tr'ondek Hwechin were safeguarded. When Dawson became overcrowded with prospectors, miners and settlers, Chief Isaac moved his people to Moosehide. He also thought their cultural songs and dances would be threatened by newcomers. For safekeeping, Chief Isaac took the traditional Han songs to First Nations people in Alaska.

Chief Isaac was right. Until the 1980s the songs were forgotten by nearly all citizens. Hardly anyone in Dawson knew these songs. In the late 80s and early 90s, several Tr'ondek Hwech'in citizens began the process of reclaiming their culture. This included bringing back the Han language, song and dances.



Since 1993, the Tr'ondek Hwech'in citizens and newcomers gather downriver from Dawson City at Moosehide in the tradition of their ancestors to visit, sing, dance and share their culture. People come from the Yukon, Alaska and all over the world to this gathering.



At each gathering old songs are sung, especially by the Tr'ondek Hwech'in Singers and Dancers, many who are young men and women wanting their culture and language to be kept alive. Often these songs are brought to the gathering by people from Alaska who were told to return the songs when the time was right. As Elder Percy Henry says, "At first I thought it was impossible, but now I think nothing is impossible. They still have a lot to learn, but they are learning. I'm really proud of these young people now."



Many of the elders say they are hearing these 'long ago' songs for the first time in many, many years. It brings back memories of the language they used to hear when they were young.

In the future, we hope to hear more of the sound of our language through story and sound.



## Sounds can be Grouped

Look at the pictures below:



1. What are some **natural** sounds you would hear?

---

---

---

2. What are some **mechanical** or **human-made** sounds you would hear?

---

---

3. What are some loud sounds you would hear?

---

4. What are some quiet sounds you would hear?

---

5. What are some pleasant sounds?

---

6. What are some sounds made by humans?

---

7. Circle the sound in each group that does not belong. Think about why it doesn't belong? Tell someone and write why it doesn't belong.

a. computer      truck horn      car horn      talking

---

b. siren      bell      alarm      whisper

---

c. raven      talking      dog      barking      telephone ringing

---

d. laughing      siren      coughing      singing

---

e. clapping      coughing      knocking      tapping

---

8. What is silence?

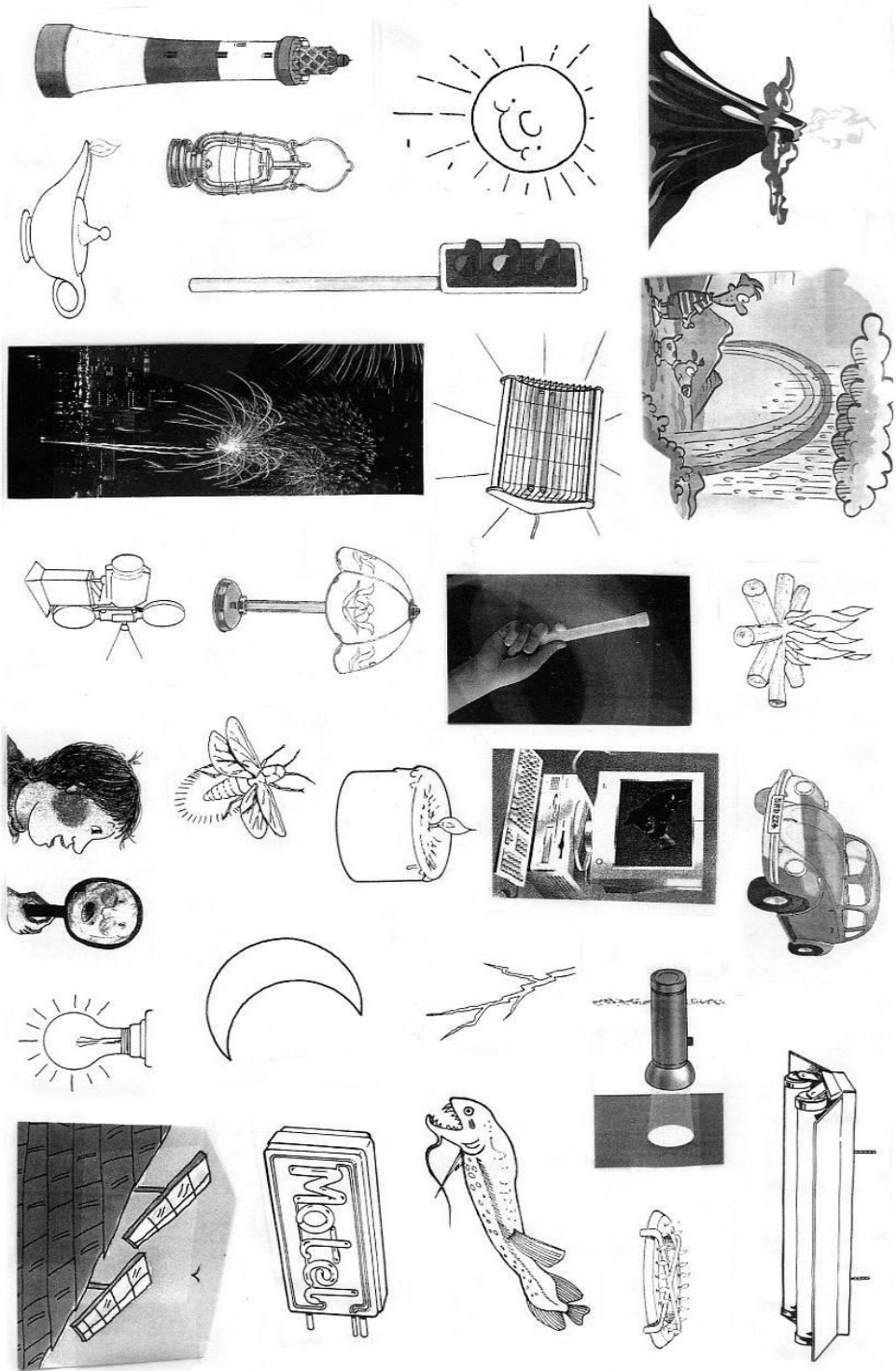
---

9. Where is their silence?

---

10. When is their silence?

---



## Lights Around Us


1. What are some natural light sources around us?

---

2. What are some mechanical or human-made light sources around us?

---

3. Draw a picture of life long ago showing what people did for light. Tell someone and write words to explain your picture.



4. Draw a picture of life today showing what people do for light. Draw pictures and give words for all things that give us light. Tell someone and write words to explain your picture.



5. Circle the light source in each group that does not belong. Tell someone why doesn't it belong? Listen to their answer. Discuss your answers.

a. computer screen      television      flashlight

b. burning log      burning candle      burning kerosene

c. moon      lightning      woodfire      sun

6. What is darkness? \_\_\_\_\_

**Life without Electricity:** *The following story is an adaptation of an interview with Jaco and Annie Peterloosie, a story that many people who lived along the Yukon arctic coast could relate to.*

At first all we had for light and cooking was the oil lamp. The lamp was made of a soft rock. It was carved to be like a bowl. We would put animal oil, especially whale oil in it. In the dark season we sometimes had the moon for light when cooking, but still, even with the moon, it was so important to have the oil. It was very important to us.

If we were working inside we needed to see well, we could light more of the oil lamp to get more light. The oil lamp had a wick of cotton flower in it and by lighting more of it we got more light. We could take a stick and dip it in the oil of the oil lamp and light the stick. Then we could carry the stick and use it to look for things inside.

When we worked outside we would have the oil lamp near the entrance. Then the light from the oil lamp would give light outside and we would be able to do work like fixing sleds.



Then when the kerosene lanterns and primus stoves came, it was so different. We could light up the night outside because of the great light it gave off. We used to be amazed that there could be such bright light from the kerosene oil lamp. We took care of the lamp because the glass was so fragile. It was easy to break and it was very

important to us. We used these things sparingly as we needed to conserve the fuel. The oil lamp was still used.



<http://www.dianefarrisgallery.com/artist/xiong/ex96/images/image08s.jpg>

I remember the first time the kerosene lantern came to our camp. It was so bright. I would look at it really closely for a long time and then when I would look away I would see lots of black spots because I had looked at the light too closely. Or, sometimes you would get black soot on your face from the lantern because we would put our face so close to it.

I remember coming to the Hudson's Bay Trading Post and coming near the store. It was so bright inside and the light was hanging from the ceiling of the store. I was fascinated that there could be so much light and that it came from this object hanging from the roof.

The light was in the store and in the police station and the church mission. These were the only places that this light was found. The mission, police station and store all had wind generators. The wind would make or generate electricity and this would be used to make the lights go.

It was only when we moved to the houses provided by the government in the 1960s that we had lights like this from electricity. By that time the electricity did not come from a wind generator. By then it came from fuel generators.

I think sometimes that we should still be using wind generators.

**How Things Have Changed:** *This is an adaptation of an interview based upon conversations with people who lived along the Yukon River.*

It was not easy living in the winter camps. I recall there were many times we did not have enough food or fuel for cooking. Within our family, we used to help each other especially when we had to hunt in one location. We would help out the people that needed to be assisted in any way which included food to eat. Wherever we lived we found that it was very difficult to do it on our own. We were constantly faced with difficulty. Little do they realize today that even drinking water was hard to get. Thirst is something that is hard to endure.

When we moved to the community, life changed. The things that before were hard to come by like heat and shelter were now given freely to us. We were very thankful we were given all of this. It was not like we asked for it. In the beginning we would do things for each other. For example, when we were running short on ice for drinking water we would hitch up our dog team and go out to get some ice from the river for drinking water. So after the community had been settled, they used to cut blocks of ice in the fall so that there would be some ice for the coming winter. We use to get some ice for the whole community. If we saw that a certain household needed ice for their drinking water we would take it upon ourselves to go and get some water for them. So this was the way we youngsters would do things in our time. If we felt that another household needed some more ice, we would go back and get some ice for that certain household.

Soon, those who were made to cut some ice blocks were earning a pay to do the cutting of blocks of ice. We had never been paid before for getting some ice for drinking water. Indeed, it never occurred to us for any type of cash payment when we were getting some ice for drinking water. Then it became expected that you would be paid. Soon, it was expected you would be able to be given ice or water.

What was first given freely was now expected to be given. I began to not give so willingly when people expected it. Now we are assisted with everything. All of the heat and light are provided for by the government.

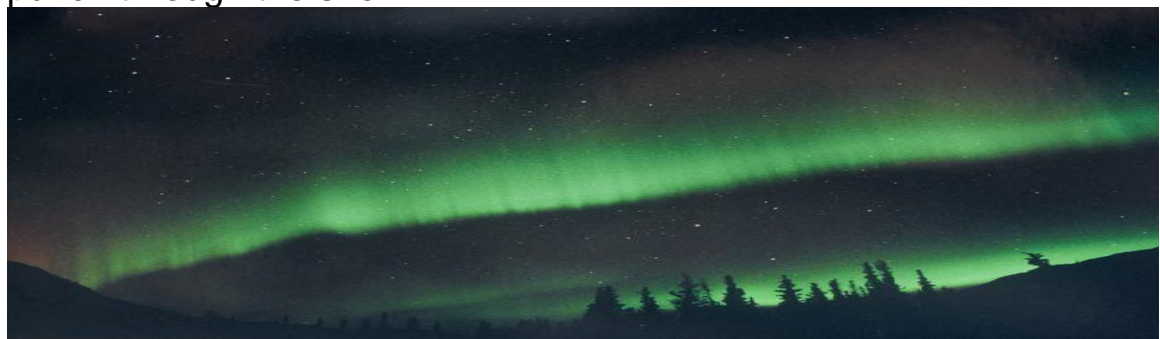
**Northern Lights:** *The following interview with Sheba Selamio of Aklavik, to the west of Inuvik. Sheba spends her summers on the north coast of the Yukon near Hershel Island.*

When we were children, we used to play outside a lot. On clear cold nights you could sometimes see the northern lights, even in the summer when we were at Shingle Point near Herschel Island. We used to play outside a lot for a long time. It was because we were warm dressed in caribou clothing. We would play games for hours outside.



I used to see different colored northern lights. Some were bright pink in color. When the northern lights came by, we would whistle at them and they would increase in speed and color. They used to make a swishing sound when they picked up speed. You could hear them more when it was very cold nights. The northern lights always vary in

color and in speed. Sometimes they are very light in colors. When you whistle at them they become brighter and start to move faster. Sometimes they are just pink. Sometimes they are very bright in color. The adults used to tell us we had to be very, very careful outside playing in the winter because the northern lights could cut off our heads. There was a belief that the northern lights were using animal heads for a football and they played by kicking around the animal-head football. It was said that they used animal heads like caribou for a foot ball when they kick it on to the ground and it would punch through the snow.







That's what I have heard about them. They may not be true but it may be true. That made me be suspicious of them cutting human heads off and I was scared of them. When we whistled at them they would make swishing sounds and they would pick up speed and that used to be really scary thinking that they would cut my head off if we bothered them by whistling at them. They did not make a loud noise. They made a swishing sound when they go fast. You could hear them because there were no other sounds. People say the northern lights do not make sounds. I believe this is false. Maybe these people have not seen them when it is really cold or in a place where there are no other sounds.

Now it is harder to see the northern lights because we don't go out as much. We see them more when we camp in the spring and fall because we have no electricity lights. Now and then I check for them but it is not the same with the electricity lights. They still probably do look bright but the electricity lights make them seem not as bright. Even the stars are harder to see.

There still is a belief that they would cut your heads off. I think it has something to do with the speed they go at. If they come close to where you are and they touch your head, then it is cut off.

Although I never heard of anyone losing their head because of the northern lights, it still feels frightening because I remember these stories.

**The Moon and Hunting:** *This is an adaptation of a story told by Thomas Selamio of Aklavik. It is a story repeated across the northern Yukon, NWT and Nunavut.*

From an early age I was shown to look at the moon and to know what the appearance of the moon meant.

There were many stories to be told that had to do with the moon. Sometimes we were told things that weren't stories. It was just important for us to know these things as they would be important in knowing what was ahead.

We did not have electricity or fuel in those days so the moon was very important in the dark season. We had to conserve our fuel and the moon, especially when it was full was a major light source. It was like the days were longer and travelling for hunting was easier. You could see the hazards as you travelled by dog team. For many weeks we would not see the sun and the moon was our only light. It was during this time that it was very cold and hunting could be very hard.

The moon would tell us what the next month of weather and hunting would be like. We would look for the first sign of the moon after the new moon. It was important to look at the appearance of the first moon.



We would look to see if it was leaning or not. When the moon comes out, and just before it starts to grow, if it comes out tilted up, there is a saying that goes: It is bringing wind. What it means is that the winds will prevail as the moon gets bigger. If it comes out in almost a vertical position, it is said that the weather will be fair.

We would look at the moon and if it was leaning we would still hope that the days ahead would be good for hunting. It was not always a sure thing. Nothing was ever certain, but it did make you hopeful.

**The Boy in the Moon:** *A story from the Western Arctic based on the stories told by Johnny Semple of Fort McPherson. Again, this is a common story in the Yukon and NWT often with local modifications to the story.*

**"THE BOY IN THE MOON"**

story told by **Johnny Semple**

This is the story of the Boy In the Moon. The Boy's name was Marten because he always wore marten skin trousers.

A long time ago, when this story took place, long before the whitemen came to this country, there was an elderly couple who could not have any children. One day, to everyone's surprise, when they thought the woman had passed the age of childbearing, she produced a son. Now this boy was not like other children - he could walk and talk when he <sup>was</sup> a few months old. He had wisdom and knowledge beyond his years. Also, he had a surprising power over the animals so that they obeyed him.

When he was six years old, there was a terrible famine and the whole tribe was starving. There was no caribou to be found anywhere because they had migrated further away and the Gwich'in didn't know where they had gone.

Then little Marten went to his father and asked him, "Father, let me help our people. Let me make some medicine. I will find where the caribou are so that we shall no longer starve."

His father replied, "You can't make medicine. You are only a little boy. Little boys don't make medicine."

But the child pleaded and pleaded and the situation was so desperate that the father agreed. But little Marten made one condition. He said, "When you kill the caribou, because of the fact that I've found them, I want you to keep a part of the fat from the stomach of the best cow caribou for me." Marten's father agreed to this condition.

Well, the little boy sang and drummed and went round and round the fire until he was tired. Then he laid down, put his blanket over his head and went into a trance. When he awoke he

told his tribe where the caribou had gone.

Although they didn't really believe Marten, they thought they would try to find the caribou where Marten said they were as a last desperate attempt. Led by the father, they went out to hunt, and to their amazement they found the caribou and had a successful hunt.

When they came home, Marten demanded his piece of fat from the stomach of the best cow caribou, but his uncle said, "It is ridiculous! We can't give this to the child! Why should he have this?"

"But you promised," said Marten.

"Nonsense, he can't have it!" said the uncle.

So Marten began to cry and sob and sob bitterly.

The uncle said impatiently, "Oh! Go away! GO and live in the moon and don't make a noise."

But the father said, "It's not good for the child to cry like this. You must give him his piece of fat."

They argued and argued, but finally the father got his way and got a little piece of fat for Marten. Marten, however, said to his parents, "I am going away. I am going to live in the moon. You won't see me again. It's because my people don't believe in me, but one day they'll come to believe in me."

Martens parents were very atonished and they didn't believe in that he was going away. But, in the morning, when they came to look for him, there was no Marten anywhere. And when they looked up in a tree nearby they saw the marten skin trousers hanging in the tree.

However, Marten came back to his family later on. He came down to fetch his dog whom he loved very much. He said to his parents, "I am going to teach you a song. Whenever times are gad, you sing this song to me and I will show you where to find

the caribou."

He taught them this little song and he said that when times were bad, and when the moon was eclipsed, the Gwich'in must dance with their packs on their backs and their arrows crossed, singing the song and he would always help his tribe.

He also told his parents that they would never starve, even if the other people began to starve, for he said, "Put your caribou in a sack and never take it all. Always leave a little bit, and when you go back you will find that there is always plenty to eat in your sack."

Well, this happened as he said, and the other Gwich'in wondered why they never starved. Finally the older people taught the other Gwich'in this song of the their little son, the song of the Boy in the Moon.

The boy went back to the moon, taking his dog with him and they say to this day, on bright nights, you can see the bog standing there with the caribou fat in one hand and the dog by his side.

**The Man in the Moon:** *A story from the Western Arctic – Yukon and NWT. This narrative is retold by Lazarus Sittichinli. Again, this is a common story in the arctic often with local modifications to the story.*

Long ago, a boy was born and he lived with an old couple. While he was very small, there was the hunting was bad and there was no meat. One night as he was sleeping between his father and mother, he said to his father, “I want to be a medicine man”. His father looked at him and said, “You look so small and pitiful, don’t talk like that”. Even then, he kept saying he wanted to be a medicine man. So that night he decided he would become one.

He wanted lots of caribou to come to the people, so the next day the men went out hunting and came to where there was a large herd of caribou. The caribou were all killed by the hunters. One caribou was real fat and the little boy’s uncle had killed this fat caribou. This was the one the boy wanted, but his uncle was stingy with his meat and he didn’t want to give any piece of fat meat to the boy – so a hind leg of caribou was given to him and his father by someone else. The old man packed the caribou leg home with the little boy. After returning home, that same night, the boy advised his father and mother to keep the caribou leg wrapped up in a nice clean skin. “Cut a piece of meat from this caribou leg when you get hungry and always keep it wrapped and put away”. That night all the caribou that were killed all came alive again and disappeared and there was no meat again and the people were all going hungry. One night the boy talked to his old parents and said, “You people will live for a little while, but I will live forever and the people will always see me as long as there is an Earth”. You will be able to survive if you always eat the meat I’ve saved sparingly.

That night he disappeared. He had a young pup and this pup was gone, too, along with some caribou blood. Another piece of advice he given was, “I will be in the moon and that’s where you will see me. When a new moon appears, and if my pack-sack is full you see me leaning back. When you see me like that, be happy and sing and dance among yourselves because when my pack looks heavy, it will mean a good winter with plenty of meat.



## Important Lights & Sounds Around Us

1. Draw a picture children playing when the northern lights are in the sky. Write a story about the northern lights from the story told. Find out what causes the northern lights.

Sheba's Story	Scientist's Story

2. Draw pictures and write names of sounds and lights that are important to us.





**Important Lights and Sounds.  
Think and Explain Why They Are Important?**



**The Raven Steals the Sun:** *Adapted from a story told by Johnny Frank of Fort McPherson. Retold by Susan Beaumont. This is a common story across the northern Yukon.*

One time, long ago the sun was not always in place in the sky. Instead it was hidden down in the Earth in the house of the Grizzly Bear.

Grizzly Bear lived there with his daughter. Bear kept the sun jealously guarded in a huge medicine bag hanging in a corner of his house. He had taken it from the sky because he was angry at the other animals for sneaking into his house and stealing things. You see, no one was allowed to touch Bear's medicine bag and when Bear caught Fox stealing he tore off Fox's shoulder and then let him go. Fox was in such pain that all his animal friends helped him get his shoulder back and the friend that helped him to do this was clever Raven.

Bear was angry when this happened and was very greedy. He wanted to keep the sun all to himself so he had all of the heat and light. "I have all of the light in the world," gloated Bear, "and I'll never give any of it away. It is my most important possession." With the sun gone, the land was completely dark. Even the moon could not be seen. The land was as black as Raven's feathers. No longer were there days. There were only nights. Even the moon could not cast light.

The animals that were used to hunting by daylight or moonlight could not. The other bears and foxes and owls became very hungry and were starving. Raven loved to be well fed and wasn't pleased at all with Bear. He was also getting tired of stumbling around in the dark and bumping into things. When the other animals started to make plans to get the sun back from Bear, Raven was glad to help even though he knew Bear was very powerful, wise and could get very angry.

Raven thought about how he could get the sun back. He knew that everyday Bear's daughter came out of the house to get water from a stream. So, Raven made himself into a little speck and floated in the water. When the girl stopped to drink some water the speck went inside the girl. Without realizing it she had swallowed raven who now made himself comfortable and changed himself into a small bear. Then he went to sleep for a long time.

During this time, the girl realized she was pregnant. Soon she gave birth to a baby boy bear. He was a very handsome baby with shining black eyes which made him look bright and curious. The little boy grew rapidly. At an early age he could walk. His grandfather played

with him and loved him dearly.

But, the little boy knew his mission. He was there to find the sun. The boy noticed a light coming from a bag. He howled and howled and grandfather ended up letting him play with what was in the bag. The boy was delighted to see such a radiant, glowing ball of light. Grandfather cautioned him not to roll the ball out of the house. He rolled it in the house and was delighted how it lit up the entire house. Each time he rolled it, he rolled it closer to the door. Finally, the ball rolled outside. The boy ran after it and rather than bringing it back he hurled it into the sky. Instantly everything changed. There were colors and shadows and even the moon now had light. When Bear saw the sun being hurled into the sky he gave a roar of anger and rushed for his grandchild. He came close and closer and was jumped to grab him. Just then the little bear changed himself back into a Raven. The boy thrust his wings downward and flew up into the air crying, "Caw! Caw" Caw". As the Raven flew away the Bear landed headfirst in the stream.



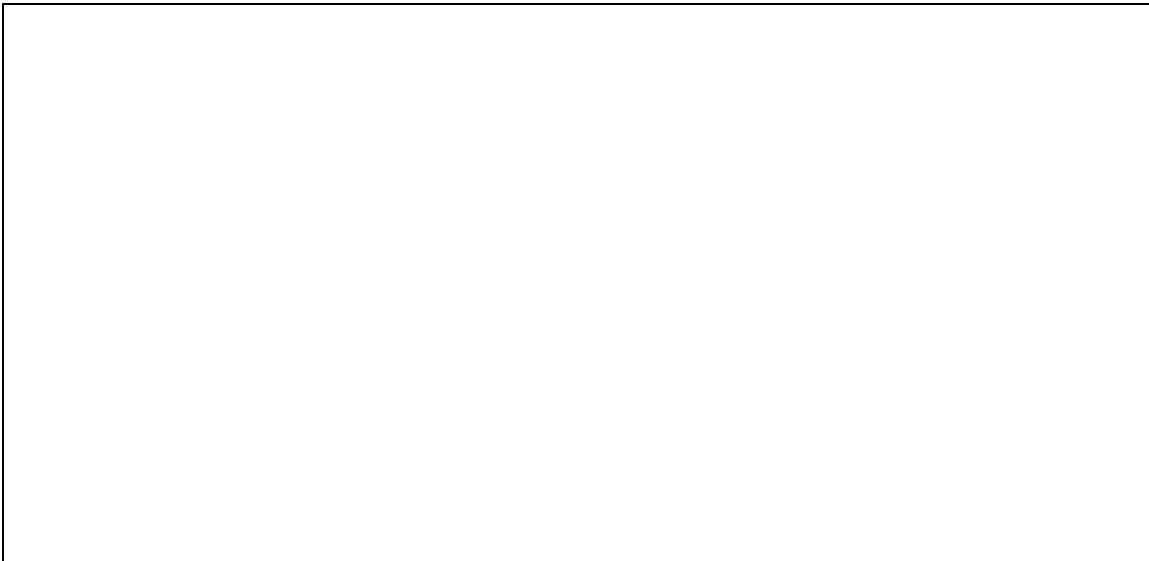
[http://farm1.static.flickr.com/122/311510599\\_6423c75d0c.jpg?v=0](http://farm1.static.flickr.com/122/311510599_6423c75d0c.jpg?v=0)

When Bear dried himself off, he had a good look around and realized how beautiful the land was now that the sun was back in the sky. And from that time on, there was sunlight and all of the animals rejoiced. Raven rejoiced too as he flew on, admiring the effect the sun had on the world below.

## Raven Steals the Sun



Draw and tell your own story about how Raven stole the Sun from Bear.



---

---

---

---

---

---

## The Raven Steals the Sun

Adapted from a story told by Johnny Frank  
Retold by Susan Beaumont

One time, long ago, when animals could talk to one another, the sun was not always in its place in the sky. Instead, it was kept hidden down here on the earth, in the house of the Grizzly bear.

Bear kept the sun jealously guarded in a huge medicine bag hanging in a corner of his house. He had taken it from the sky because he was angry at the other animals for sneaking into his house and stealing back Fox's shoulder. You see, no one was ever allowed to touch Bear's medicine bag and when Bear caught Fox prowling around his camp one day, he dragged him in, tore off his left shoulder and then let him go. Fox was in such pain that all his animal friends helped him get his shoulder back again by calling upon clever Raven. But that is another story.

Bear was angry and on top of that, he was greedy and wanted to keep the sun all to himself. "I have all the light in the world," gloated Bear, "and I'll never give any of it to anyone." The sun became his most precious possession, next to his only daughter, over whom he also kept a careful watch, allowing no one to come near her.

With the sun gone, the land was completely dark, blacker than a moonless winter sky at night, blacker even than Raven's feathers. No longer were there days, only nights.

The animals who were used to hunting by day were unable to find their game now. The lynx and the owl, who were night hunters and able to see very well in the darkness, had to hunt all the time but they were unable to get enough meat for everyone. The animals were beginning to starve.

Raven, as you know, loved to be well fed and wasn't at all pleased with the way things were going. He was also getting tired of stumbling around in the dark and constantly bumping into things. It slowed him down, making it quite impossible to do the things he enjoyed, such as playing tricks on others. So when the animals got together and decided to ask Raven for his help again, he was quite willing to make a second trip to Bear's camp, even though he knew that Bear was very powerful and wise as well as being angry at him for stealing Fox's shoulder.

So Raven was sent to Bear's camp to steal back the sun and return it to its former place in the sky. When Raven arrived at Bear's house, he was afraid of just walking right in so he hid himself in the willows nearby and waited for his opportunity. He thought and thought about how he could safely enter the house.

Raven soon learned that the daughter often came out of the house to get water from a little stream just outside. One day, he hid himself by the stream. When she leaned down to fill her bucket, Raven turned himself into a small spruce needle and dropped himself into the water and floated down just in time to be taken up into the bucket the girl was dipping in the stream.

When the girl saw the black speck in her pail, she emptied the bucket and dipped up a fresh pailful. Once again, Raven turned himself into a needle and made sure he was in her pail a second time. Since the speck was still there, she again emptied her bucket. When she refilled her bucket a third time, the speck was still there but Raven had used his magic to make the girl so thirsty that she took a deep drink from the pail, and in doing so, swallowed the needle.

Without realizing, the Bear's daughter had swallowed Raven who now made himself comfortable and changed himself into a small bear. Then he went to sleep for a long time and as he slept, he grew.

That very night, when the girl returned to her camp, she realized that she was pregnant! She was too afraid to tell her father who she knew would be very angry. But by the very next day, her stomach had begun to swell and on the third day, she gave birth to a baby boy.

Her father was very puzzled because he was sure that no one had come near her but he was so delighted with his new grandson that he soon forgot his anger. He was a very handsome baby with shining eyes which made him look bright and curious. Naturally, the boy was really Raven.

The little boy grew very rapidly. By the end of the first day, he was crawling about on his hands and knees, and by the second day he was playing like a young boy. The bear became very attached to his grandchild and spent many hours playing with him, making him toys and inventing games for him.

Soon the little boy was crawling everywhere around the house, trying to find where the sun was hidden. Then he noticed a light coming from the corner of the room. When the little boy saw the bag by his grandfather's bed, he began to cry noisily. His crying sounded like the cry of a spoiled child and the squawks of an angry raven.

Bear at first paid no attention to him but when the boy continued to cry, the bear turned to his daughter and asked, "What is that child crying about?"

"He wants to play ball with the sun which you keep in your bag. You will have to give it to him if you want him to stop crying," she told him.

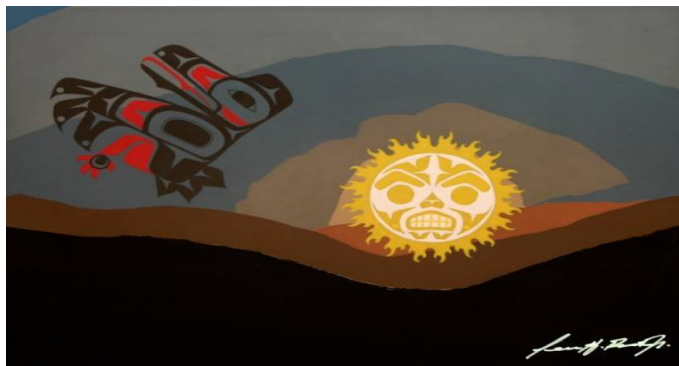
Bear hesitated to let the sun out of the bag, but since he was so fond of his grandson, he found it hard to refuse him anything. So as many other grandfathers have done since the beginning, he finally gave in to his grandchild. He untied the bag and gave the sun to the child. It was a beautiful, radiant ball that made the little boy laugh with delight. Bear tossed it to his grandson on whom he lavished so much love and affection.

He cautioned him not to roll the ball out of the house. Immediately, the little boy stopped his crying and began to play with the ball, rolling it along the floor and laughing with glee at the way the great light lit up everything in the room, especially his mother's pretty face. (Raven has always had an eye for pretty things.)

Each time the little boy rolled the sun a bit nearer the door. Finally, the ball rolled outside. The boy ran out after it, but instead of bringing it back, he hurled it high into the sky where it remains today. Instantly, the world was transformed. Rivers and lakes sparkled in the light. Everywhere colours could be seen again. The trees cast shadows over the land once more.

When Bear saw the sun go hurtling off, he gave a roar of anger and rushed for his grandchild. The boy ran to the edge of the stream with Bear right behind him. Just as he reached the water, Bear leapt for him, but at that moment, the boy changed himself back into Raven. He thrust his great wings downward and flew up into the air, crying "Caw! Caw! Caw!" while Bear landed headfirst in the stream.

When Bear dried himself off, he had a good look around and realized how beautiful the land was now that the sun was back in the sky for everyone to enjoy. And from that time on, there was sunlight and all the animals rejoiced. Raven rejoiced too as he flew on, admiring the effect the sun had on the world below.



## Sounds Come from Things that are Moving

1. Put your fingers of your throat and feel the vibration as you speak. Draw a picture of the feel of the vibration for different sound volumes:

No Sound	_____
Quiet Sound	~
Loud Sound	
Very Loud Sound	

2. Draw many small pictures of things that make sounds and draw an arrow to point at the part of the object that is moving that is making the sound.



2. Draw a picture to show a sound vibration for a quiet motor or speaker.

3. Draw a picture to show a sound vibration when a loud motor or speaker.

4. What does the bead or seed do when the tapping on the desk is soft?

5. What does the bead or seed do when the tapping on the desk is hard?



## Investigating Light

1. Complete this table:

LOCATION	THINGS THAT MAKE THEIR OWN LIGHT	
	Natural	Human made
Classroom		
Outside		
At Home		

2. Draw a picture of how light travels and what it does when it comes in contact with things in the air.

3. Describe each picture. Why can you see the light?




---



---



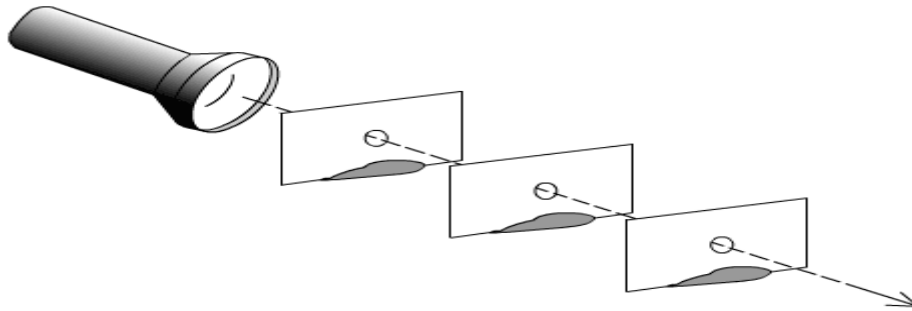
---



---

## Investigating Light

1. In our experiment, we set up the cards like this.



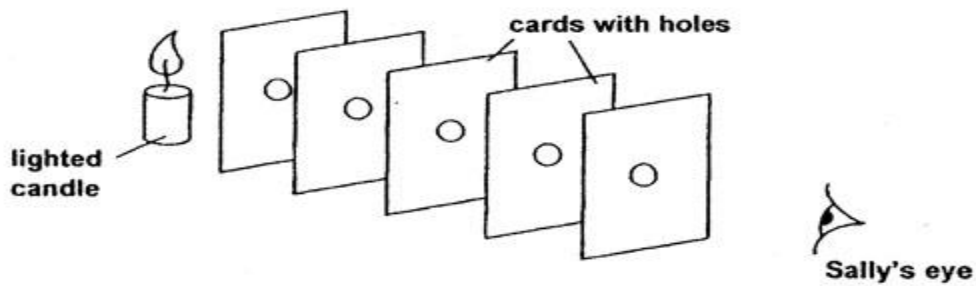
What happens to the light if the card in the middle is moved?

\_\_\_\_\_

What does this tell us about light?

\_\_\_\_\_

How many cards can you set up so you can still see the candle or flame?



2. Draw a picture to show what happens when light is shone through the water. Explain why this happens.

---

---

**Dealing with Sun Dogs, Moon Dogs, Total Darkness and Total Light:** *An account provided by Frank Ahearn, a trapper in the Klondike area.*

In the winter, we often get 'sun' and 'moon' dogs. That's an odd name for them. They are only seen on clear, extremely cold days and nights. It looks like a halo or colorful ring around the sun or moon.



When I see a sun or moon dog, I know the weather is about to change. It tells me that there is moisture in the air and there is likely to be snow in the days to come, maybe in one day. I believe these are caused by the sunlight (or moonlight) striking moisture in the air and reflecting off of it to cause the halo.

In the winter, I look forward to the days that the moon will be out, especially when there is a full moon. The days in winter are short. The sun rises late and sets early, so there is not much time to do things outside. Trap lines need to be checked and wood needs to be cut, and if there is no electricity, the moon is really important. When there is a full moon in the middle of winter, it is like having the sun out in the day. You can do so much more because the light reflects off the snow.



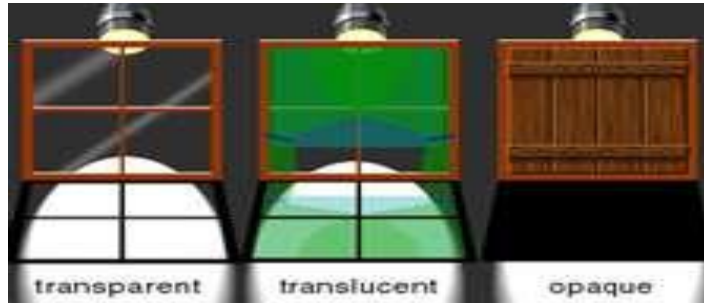
Even inside the cabin you can sit by the window and read. You want to conserve how much kerosene you use, so the moonlight becomes a natural light source.

In the summer, it's a different story. Some people don't sleep well unless the cabin is dark, so they have to put tin foil on the windows to keep the light out!

1. Below is a list of objects. Predict how will light behave when it comes in contact with it and then test it?

Object	Prediction?	Test?	Word to describe?
Glass			
Milk Bottle plastic			
Aluminum Foil			
Water			
Paper Towel			
Paper			
Glad Wrap			

2.



a) What kind of window did Frank want in winter? Why? What kind of window did Frank want in summer? Why?

---



---

b) Where in and around our house do we use transparent, translucent and opaque objects to influence light?

Material	Where used?	Why Used?
Transparent		
Translucent		
Opaque		

3. Where do we use reflective materials? Draw pictures and explain below.

---



---

## Sunlight into Rainbows



If sunlight strikes water in the air, it will separate into different colours we call the spectrum of colours. This happens and causes rainbows and sun dogs. There are normally seven colours we see and their first letters are R O Y G B I V. What are these colours?

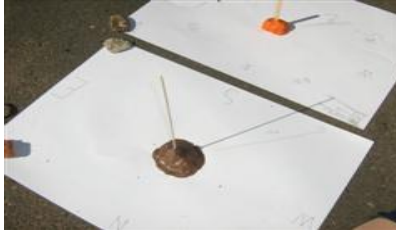
---

Most families will have stories to tell about rainbows and sun dogs. Ask a family member what stories they have heard about rainbows or sun dogs. Write and draw what you learn about these in the space below.

<hr/> <hr/> <hr/> <hr/>
-------------------------

## Investigating Light: Looking at Shadows

### Measuring Shadows:



- You need to put a straw in some plasticine and stick it to a large piece of paper like shown in the picture.
- Place the paper in an area where the sun can shine on it for a few hours. Do not move the paper.
- Check the paper every hour and draw the length of the shadow.
- Draw on the paper where the sun is located.
- Measure the length of the shadow.

Time?	Length of the Shadow?	Where is the Sun?

1. Why is there a shadow? \_\_\_\_\_
2. Why are shadows short around lunchtime?  
\_\_\_\_\_
3. Why are shadows longer in morning and late afternoon?  
\_\_\_\_\_
4. Why are shadows shorter in at lunchtime in summer than winter? \_\_\_\_\_
5. Look at the pictures of shadows below. Can you figure out where the sun is? Think about what causes the shadow. What two things are necessary for a shadow to form?



## We Need Light to See Things!



For this activity you will need:

- A shoe box or box with a lid
- Scissors
- Pictures from cards – sports cards, magazines, birthday

cards

- Glue

1. Cut a small hole in the front of a shoe box and a square hole that can open and shut on the top of the lid. Line the hole with brightly colored cellophane.

2. Cut up images from sports cards, glittery Christmas cards and stand them up inside with modeling clay or glue to create a scene.

3. Look inside with the square hole on the lid closed and find out what you can see. If the hole is shut securely you will not see much. Open the hole in the lid and look again and describe what you can see. Try shining a flashlight through the top hole. Discuss the need for light to see things.



## We Can Use Light to Cook Things!

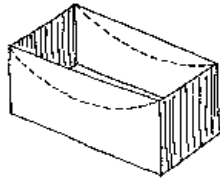
### Solar Hot Dog Cooker

Use the heat of the sun to cook.

A reflective hot dog cooker can be built from a cardboard box, tin foil, and poster board. Sunlight hits the reflective surface and focuses on the hot dog held in the center. Students can work in pairs or individually if there are enough materials.

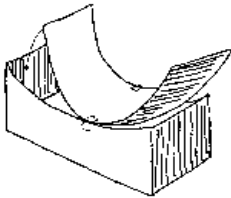
1

Select a long narrow box; the longer the box the more heat collection is possible. Choose a focal length between 5" and 10" and design a parabolic curve as seen in the picture. One template could be used for all the cookers. Trace the curve on the open end of the box so that it is centered and straight.



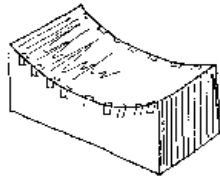
2

Cut out the curve with a utility knife. Stress the importance of being exact. Measure and cut a piece of posterboard that will fit flush against the opening to the box. Attach this with tape beginning at the center and working toward to edges.



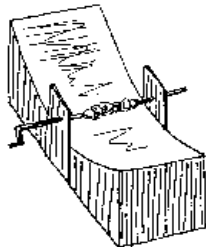
3

Cover the curve with white glue and apply aluminum foil shiny side out. Start in the middle and smooth toward the edges. Try not to wrinkle or fold the foil; you want it as smooth as possible.



4

Use two scraps of cardboard taped to each side as supports. Using the sun or a projector light, test the focal point. There should be a bright spot where light is concentrated; mark this spot and punch a hole for the skewer. Use a section of a coat hanger from which the paint has been removed for a skewer.



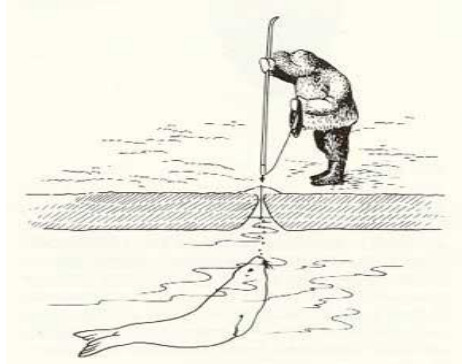
5

Enjoy your hot dog!



**Hunting Seals:** This is a story from Beaufort Sea area in the northern Yukon & Northwest Territories

When the ice forms, seals still must breathe so they make breathing holes in the ice so they can come up for air. Seal have very good eyesight.



When I first started out hunting when I was eight years old, I was told to be careful about the sounds I'd make and how I moved because it was so easy to be heard and seen. In the fall, there was usually no snow on the thin ice and this made it more difficult for hunting. The seal could see you through this ice. My father asked me to get into position beside a breathing hole. Sometimes I would have to stand on a caribou hide so the seal could not see me. He gave me a gun or a harpoon to shoot at the seal. So I was positioned ready to shoot. I would not move my feet at the hole he made me stand at. Before he left, he told me that I should not drop my mitt on the ice when I was going to fire a shot.

He said if I did this, the seal would hear me and immediately flee the hole. He had instructed me against putting my mitt on the ground. I saw the water in the hole begin to bubble and I know there was a seal there. I inserted a bullet into the chamber. I started to aim at the seal below. I took the mitt off by my teeth so that I could pull the trigger. The mitt started to get in the way and I was getting frustrated. I thought I might drop my mitt from my mouth so I took it, and I started to place it on the ground, but it dropped. At that moment when the mitt hit the ice, the seal splashed and fled. My dad told me they had an acute sense of hearing but I didn't realize it was so good. I learned not to do that again.

From then on I knew I had to be careful of how I moved and even what I wore on my feet.

**Hunting Muskrats:** This story is an adaptation of stories told in Old Crow and Aklavik (Danny C. Gordon).

Muskrat have a very good sense of hearing.



In the spring when we're trapping rats or 'ratting' the sounds travel easily. You can hear sounds made from another lake. You can hear people far away from the camp. It's not like that in the summer when you're at the camp. Then the sounds are not so great. During ratting time it's just like people are right there close by especially when it is colder in the late evening and early morning. This is the time when you are ratting. You can call the muskrat, and they can hear the sound even though it's so far away. They will come from the other side of the lake and it's hard to believe they can hear from that far away.



We set traps in the muskrat pushups in the spring. These are the muskrat lodges where they live, especially during the winter. Later when it starts to melt you can travel by boat or canoe during ratting and pull your boat from lake to lake. The muskrat don't seem to be too bothered by the noise of the kicker (outboard motor). You can talk quietly and the muskrats aren't too bothered by that either. If the boat hits the ice and the muskrats are on the ice they are able to pick that

up vibration and they are gone immediately. They can sense that through the ice. If you are hauling the boat into a lake and there is thin young ice and the boat touches that ice it makes a loud sound and the rats can hear that to. They'll dive into the water. So you have to be careful knowing what sounds they can hear. The sounds travel through the ice. You can't hit the ice with the boat. I am amazed how sensitive their hearing is to the sounds through the ice and the calling.

When you call the muskrat they can hear you and they come right up to you. It's only for a certain time of the year that they will come and then it's over. It's like a switch, after that they won't respond to the call. After that they don't respond to the calls. By sucking in your lips and making a vibrating sound between your lips, that's how you can make the squeaking sound. When they're mating in the spring they will travel a long way just to get to the sound you are making. It's like they want to come right up to the boat and climb right into the boat. Really they just get so excited during mating season. That amazes me.



When you are paddling, you are always calling, but if you travel with outboard motor you don't take the time to call. After a while your lips are so sore because you are sucking them in all the time to make the squealing noise.

I think I would encourage young people to take their time and try to call. It makes it so much more challenging and interesting.

## Sounds Travel

1. Draw a picture of the hunter on the ice and the seal in the water near the seal breathing hole. Explain the story by talking about sounds and vibrations.



2. Why did the hunter have to stand still or walk quietly? Why was the hunter told not to drop her mitten on the ice?

---

---

3. Why is hunting on clear and thin ice difficult?



---

---

4. What did you learn about muskrat and hunting muskrat from the stories? Draw a picture of the inside of a muskrat lodge. In the picture draw and explain what you have learned and tell someone about what you have drawn in your picture.



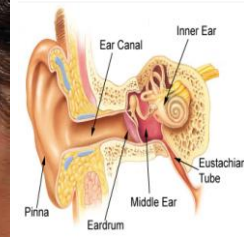
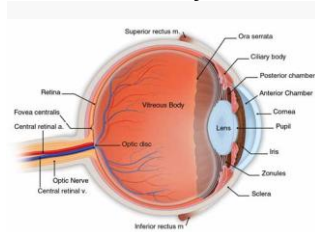
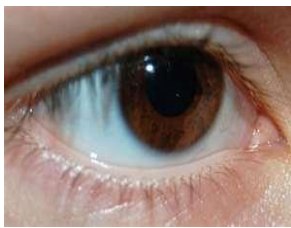
5. In the northern Yukon, muskrat are mainly found in the Old Crow area. In other areas we mainly find beaver. How are beaver and muskrat the same? How are they different? Draw a picture of each one to show differences and similarities.

Same?	Different?
<hr/> <hr/>	<hr/> <hr/>
	

## One Eye – Two Eyes, One Ear-Two Ears

1. You did some activities with your teacher that shows how important having two eyes and ears is. In the space below, draw and explain what we did to show important this is.

2. Look at the pictures of eyes and ears below.



How are the ears and eyes different? How are they the same?

How are they the same?	How are they different?

3. What are ways we can protect are eyes and ears?

---



---

## Big Ears or Little Ears? Upright or Floppy?

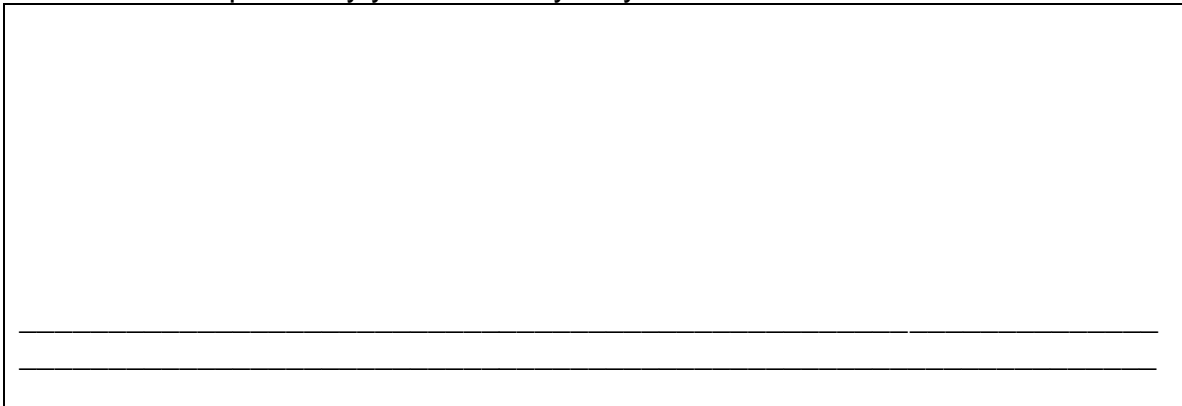
1. Draw a picture of you using the paper cones to hear. Do the bigger ears work better than the little ear cones?



2. What are these animals? Which ones hear the best? Why do they hear so well? Why do some not hear well?



3. Draw a picture of yourself with 'new ears' from some animal so that you can hear better. Explain why you think they they work better.



---

---

## Sounds: Loud, Soft, High, Low



1. What can the drummer do to a drum to make the drum make a loud volume?  
\_\_\_\_\_
2. Which drum does the drummer use to create a high pitch?  
\_\_\_\_\_
3. Which drum does the drummer choose to make a low pitch?  
\_\_\_\_\_
3. Which stringed instrument makes the highest pitch? \_\_\_\_\_. The lowest pitch?  
\_\_\_\_\_. How can you change the pitch of the instrument? \_\_\_\_\_
4. Here is a picture of a guitar player.



<http://www.musikbibliotek.dk/images/49/1868-3043.jpg>

- a. What is one way he can make the guitar make a louder volume?  
\_\_\_\_\_
  - b. What are two ways he can make the guitar make a higher pitch?  
\_\_\_\_\_
5. Beside each animal, write whether the sound it makes is a low or high pitch.



**Calling Moose:** A story told by Rita Drugan of Dawson City

We were hunting moose up the Dempster Highway during rutting season. This is when the moose are very active because they are mating. We had driven off the Dempster and were along the Klondike River. My husband, Dick Field, got out of the truck and went into the bush and I followed him. He said this was an area where there were often moose and he had seen sign of moose.



He started to call the moose. He used a rolled up piece of birchbark that looked like a bugle or trumpet. I saw him cup his hands to call before, but he said this way the sound was louder. It had more volume. He then started to call. It was a very low sound. It wasn't a grunt but it was a groaning deep sound. He was trying to impersonate a cow moose.

In the distance of the bush we could hear something coming through the bush. Dick told me to go back to the truck because he said that the bull moose can be dangerous during rutting season. He then told me to go real fast.

I started to run back and pretty soon I was really scared because I could hear the moose thundering through the bush. It was trying to get me!

I finally got to the truck and was trying to open the door to jump in. Just then I heard the crack of a gun. I looked behind me and there was the moose falling to the ground just a few steps behind me. Dick had shot the moose. The bull moose had come right up to where we were just because he was calling.

He used to practice moose calling at home and would teach his children to call moose. I think there was a different call for different times in the season. I think you can also call moose by rubbing an axe handle against a tree. I am not sure what that does but I hear it works.

This is a website where you can hear different kinds of moose calls

<http://www.sherryfelix.com/Creatures/Moose/Moose.htm>

## **Making a Moose Caller**



**What you need:**

Different kinds of containers such as disposable plastic cup (best) or paper cup or coffee can.

Different kinds of string, about 2 feet (60 cm) long. Try cotton string, nylon twine and dental floss. Try thin and fat, waxed and unwaxed, wet and dry string, even try shoe laces. Thick string and a long can work the best.

Something sharp and round to punch a hole in the cup.

Something to keep the string from pulling out if a knot doesn't work (you might not have to do this, but you will if the string is thin like dental floss or with a paper cup. You can use a button, washer, matchstick or toothpick or twig.

**What you do:****Step 1**

Punch a small hole in the middle of the bottom of the cup--just big enough for the string to fit through--and push the string through the hole.

**Step 2**

There are two ways to attach the string to the bottom of the cup. Tie the end to the matchstick or toothpick. This is more work but better because you don't have to be as careful about yanking too hard. Alternately, tie a very big knot on the end of the string that goes through the cup, to keep it from pulling through the hole. Loop it several times to make the knot fat.

***How to use the moose call.***

Usually, you will need to wet the string. Wetting it serves the same purpose as the rosin applied to bowed string instruments. You might want to try waxed dental floss. Hold the cup in one hand and the string--near the cup--between thumb and forefinger. Pull. You should hear a noise, and it should be loud.

**Making and Testing a Moose Caller**

Draw pictures of at least 5 different callers you make and describe using the words volume and pitch what kinds of sound they make.

You may wish to compare your sounds to this person's sound  
<http://www.youtube.com/watch?v=3FqfozVkrul>

Picture of the Caller	What Kind of Sound Did it Make?

Picture of the Caller	What Kind of Sound Did it Make?

Picture of the Caller	What Kind of Sound Did it Make?

Picture of the Caller	What Kind of Sound Did it Make?

Picture of the Caller	What Kind of Sound Did it Make?

## Scaring Away Bears: A Story from Rita Drugan of Dawson City

When I was a young bride, I moved with my husband to Dominion. During the gold rush Dominion was very busy place, but in the 1940s there was no one living there but my husband and I and our two children.



My husband was a dredge master and worked a long way away from where we were living. I was alone with the children most of the time. It was quite lonely because it was an isolated place, in those days about a full day drive from Dawson.

I was most scared about bears when we lived there. There were lots of bears because there were no people or mining in close by. I did not know how to shoot a gun and didn't want to shoot a gun. I asked my mother and father what I should do to keep the bears away. They told me that when I went outside, I should take a cooking pot or can with me and hit it. They told me it shouldn't be any pot or can. It should be a small pot or can, not a large pot or can. And I should hit it hard not soft. If I used a small pot or can and hit it hard, I would make the best noise for keeping the bears away.

I am not going to tell you what kind of sound that was. Maybe you can try different kinds of pots and cans to find out what is best. Try different kinds to find out what sounds they make.

--	--	--	--

**Sounds from Dogs:** The following story is an adaptation of a story told by Alfred Kendi of Fort McPherson.

Dogs make many different kinds of sounds.

The sounds mean something. We can tell when they are excited. We can tell when they are angry or spooked. Dogs are very intelligent and these sounds they make are important to us. They also have a keen sense of hearing and hear things that we can't hear. When I am at my camp or traveling, there are times I listen and I don't hear but I know the dogs hear and it is important to be aware of how they behave because this tells us things. They are so knowledgeable. That is why they get spooked very easily.

They have keen eye sight and smell. In the older days, we used to stay indoors when the weather was bad. Sometimes the dogs would all make a loud, barking sound. That meant that there was a dog team that was coming in. So we knew that a dog team was coming even though it might be far away. We used the dogs' behavior and sound it made to find out that there was a team coming in. It would also tell us whose dog team it might be. They would get excited if they knew whose it was. They could tell if the toboggan was full of meat or not by the sound it make. We could tell that too; whether it was heavy or not. They were familiar with the sounds they heard. This is even when the dog team is still far off. When the dogs hear a team coming in, they will make a sound. They know things are not possible for you to know when you are alone. Sometimes they will start howling and it appears there is no reason.

They make these sounds so that people are aware what is happening. It is very helpful. I notice they tend to get spooked easily. Well, they tend to bark easily. When they do not recognize something, they will get spooked.

There is something on this land that we don't see or hear, but the dogs do. There will be these beings as long as there is land around. They will not disappear as long as there is land. Sometimes there are those that say that there are none of these beings left. But, in my opinion, there will always these beings.

## Measuring sound.

1. What are some places in your town where you hear sounds are very loud?

---

2. Where are the volumes so high they could damage your hearing?

---

3. What are some places in your town where you hear sounds that have high pitches?

---

4. What is an example of a sound that is loud and has a high pitch?

---

5. What is an example of a sound that is loud but has a low pitch?

---

6. You are asked by the town to visit places in your town to identify loud sounds. What instrument would you take with you to measure the sounds?

---

7. Match the volume with the sound:

5 decibels

a loud voice

10 decibels

Jet Taking Off

40 decibels

a quiet voice

70 decibels

a very loud scream

100 decibels

a whisper

120 decibels

an iPod player on high volume

8. Do you think that dogs can communicate without us hearing them? Explain your answer.

---

---

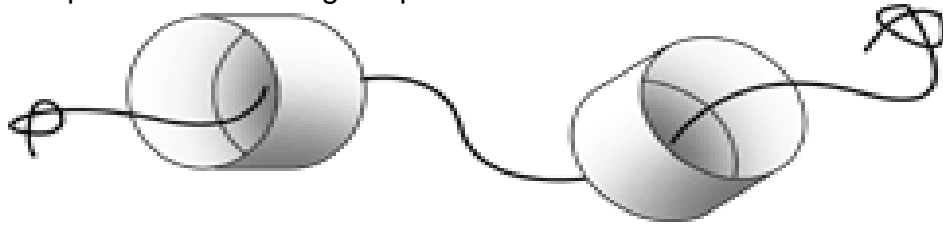
---

---

---

## Sounds Travel

1. Below is a picture of the string telephone:



a. What did you make the string out of?

---

b. How does the telephone work?

---

c. In the space below draw at least three pictures of the different phones you made.


d. Which one works the best?

---

e. Why does it work?

---

2. When you pinch the string the sound does not travel through it. Why?

---

---

3. When you joined three or four telephones, you can talk to each other. Why does the sound travel?

---

---

4. Today you made string telephones. Is this really the way telephones work?

---

**Hunting Caribou and Listening to Advice Hunting:** This is an adaptation of an interview with Danny C. Gordon of Aklavik who commonly hunts in the Richardson Mountains in the northern Yukon.

It was very difficult to hunt caribou in winter, especially when it is cold because the sound travels so well. The caribou were very alert. In the summer it was easier because the sounds we made did not travel as well and they were not as alert. Also there were more sounds around, like birds and the caribou would be occupied with eating. You had to be successful hunting because there was not much food in those days. The whole village might be depending on you to be successful, especially in the winter.



At that time of year there were not many caribou around. There might not be many opportunities to be successful so you had to hunt well and be successful. People depended on you. My dad told me I had to be a successful hunter and said there were ways you could be successful and I should listen. We would usually travel by dog team along the coast and when we saw caribou or signs of caribou we would leave the dogs and walk on foot. We would wear caribou fur on the bottom of our winter boots so that we would not make sound when we walked. As well, we would make sure that our legs did not rub because even this rubbing would make a sound that the caribou could hear. You had to be very careful not to make sound.

When snowmobiles came it changed so rapidly. The snowmobile changed all that. It suddenly became much easier. In my early days you needed lots of advice to be successful. Now it is easier. Advice is still very important, but now it is easier to be successful.

## Sound Proofing Cups

Your challenge is to soundproof cups containing rice and reflecting and absorbing materials provided in the classroom. These will include:

- 2 Plastic or Styrofoam cups.
- 10 grains of Rice.
- Different types of materials (aluminum foil, cloth, foam, paper toweling, etc.)
- Scotch tape.

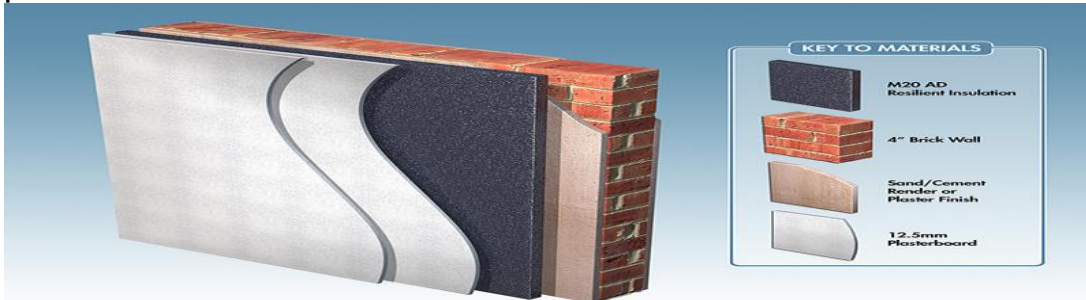
In the space below draw a design for your first soundproofing attempt. Beside it, write down *why* you think it will work and then after it has been made *how well* it worked.

What I will do?	Why I think it will work?	How well it worked?

Then, try it again making changes.

What I will do?	Why I think it will work?	How well it worked?

In the space below, draw pictures of ways a room might be sound proofed.



Explain why the materials used are different?

---

How does is this soundproof wall the same as your design?



## Sounds from Straws & Bottles

Here's some simple activities that shows that the volume or amount of space in an object influences the pitch of sound.



An amazing range of artistry and invention exists in the world of wind music making. All you need to do is make one slit of a certain size in the side of a plastic bottle, paint it with a cool design, fasten the cap to a stick, screw the cap on the bottle and stick the pole in the snow or ground - the more the better, with all different sizes of bottles and slits to create a wide range of tones and timbres.

Also, make the musical flute by clipping the end of a straw. Pinch it flat and blow through it. Change the length of the straw and note how the sounds change.

Draw pictures below of different sounds made by plastic bottles and drinking straws. Use the words pitch and volume in your explanation.

--	--	--	--

## How to Make Musical Bottles



This is a fun project for learning about your hearing. You will make musical bottles or glasses that act as a musical instrument. With the bottles, you can play a musical tune, and your ears and brain will help you do this by telling you if the sounds are high-pitched, low-pitched or somewhere in between.

1. Set eight glasses or glass bottles out on a table, and line them up in a straight row.
2. Fill the eight bottles with varying amounts of water. If you like, add different colors of food coloring to each bottle.
3. Using a teaspoon, tap each bottle gently and listen to the notes.
4. Arrange the bottles from highest pitch to lowest pitch. If some of them sound too much alike, add a little water or take away water until you get the sound you want.
5. Create a song or two that you can play on your musical bottles and invite your family to listen to your new music.
6. Try to make the sounds the same as the pitches of another musical instrument and label the glasses as the notes A, B, C, D, E, F, G, E.
7. After you have created a tune, write the notes for the tune in the space below.
8. Write the notes for your classmates tunes as well.


## A Perfect Place for Hunting Caribou: *An adaptation of an interview with Alfred Kendi*

One of my favorite memories is hunting caribou as a child with my family near the Rock River, an area along in the Yukon before the NWT border where the Dempster Highway goes by today. We had a special place to hunt in the spring that was near the Rock River canyon. I do not know if other people are aware of it to this day. My father would set up the camp in the canyon. It was a place today where you get red ochre, a stain that was used on tents and clothing.



The canyon had high cliffs around it so that it was difficult to climb up out of the canyon. When you stood in the canyon, you were surrounded by the cliffs except for the opening down the river. But my father knew it was not only good for ochre, it was also good for hunting caribou because of the way the canyon faced the area where the caribou often walked. We would set up the tents in the canyon. It was a bad place if it was windy but great for hunting if it was calm.

This place was very interesting. You would go to sleep at night and in the early morning you could hear the caribou even though you were quite a way from them. Their movement would wake you up because it sounded like they were beside the tent. You would wake up with the sound of caribou walking. It was loud and like they were right beside the tent but they were far away. The place was a place where sounds from the caribou would resonate off the walls of the quarry.

The sound was like an echo but louder and right beside you although they were far away. It was like the sounds of the caribou could not

escape and would stay in the canyon. It always sounded that there were lots of caribou in the morning when we woke up. My father would go to look while we were still waking up and he would return and often would announce that it sounds like there were lots of caribou. But often there would only be one or two caribou. It sounded like many, but there were actually only a few.

He would then try to kill them. We were not allowed to make much noise because the same way we could hear them, the caribou could hear us.

We had to walk very quietly because it was like the sound was amplified and made much louder because the sound could not escape from the valley.

*In the space below, draw a picture of the family camping. Show and explain how sounds would travel and allow the family to hear the caribou even though the caribou were far away.*

## Communication. How Has It Changed?

Interview an older person, especially a grandparent, and get them to describe how communication has changed over the years. Complete the first column for your experiences and compare it to their experiences when they were your age.

<b>Experience</b>	<b>Your Experience Today</b>	<b>Their Experience Long Ago</b>
Listening to Music		
Listening to the News		
Keeping in touch with friends and family		
Finding Out About Weather Forecasts		
Finding out about travelling somewhere far away		

Draw pictures to show how technology associated with sound has changed (examples might include music, sports, telephone, television, alarms, health, transport). Draw at least 5 pictures and explain how each works.

--	--

**Changes to Communication:** *Interview Adaptation from Joe Henry at Wolf Creek, Dempster Highway, 1977.*

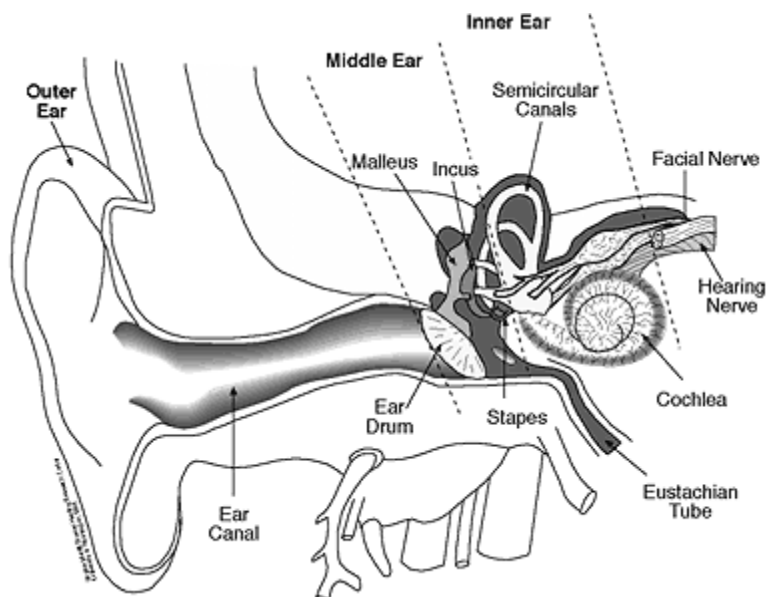
At the time when we started to live in houses in Old Crow, Fort McPherson and Dawson, there was good lighting and fuel to heat the house, and we were being served by others. We do not need to provide our own heat, nor do we have to work to get lighting in our dwelling. It is for this we are cared for in comfort.

Then there came a time when we were provided with telephone. In the earlier years when we were introduced to telephone, we could not figure out how they worked, how did the sound travel? We used to be so astonished. But after we had gotten use to them, it is not so astonishing anymore.

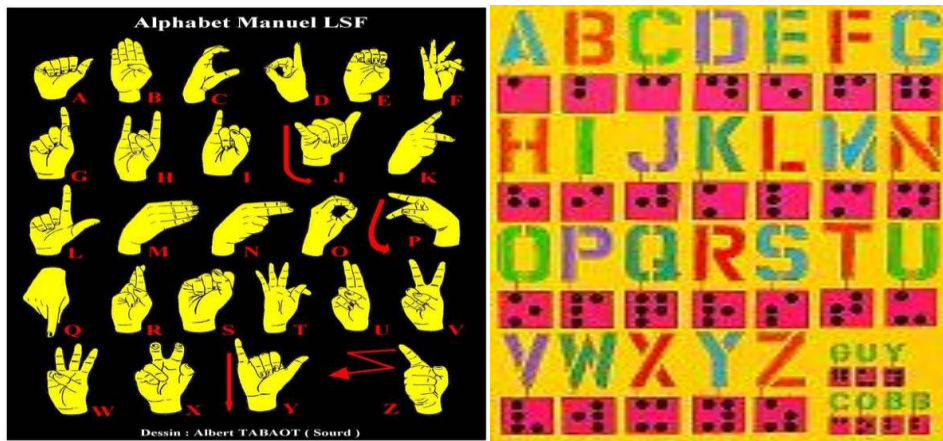
Then we were provided with these things that we watch – TV. When we got all of these things in our dwellings, now we are even more living in comfort. In those days, we had to visit our neighbor to check to see if they were okay, but now it is only a matter of using the phone to talk to them even if they live right next door. If it was not for these conveniences we would have to go and visit them to see what state they were in. So we are given all of these conveniences which give us all the comfort. We now can hear if something has happened in another community. Then there are radios that we listen to. We are informed about things that we should not have known otherwise. In fact we tend to react, “so this is the way it is.”

Then there are those that have gone out hunting, we are informed about their activities. This is amazing, in fact it is unbelievable. Even we can now hear what is going on elsewhere, long distance from us. “How did they here about it?” or something else, this was the case when we started to use them, “how is that possible?” These are the things that we use to say: “Man, how skillful the white people are, who able to come up with all of these gadgets”. These are the things that really amaze us. This was because we were were not familiar with these things. When we saw them used for the first time, we used to be really amazed with them, particularly able to hear someone that is so far, far away. Or we can see pictures on this gadget, they are moving with sound when you watch them. You are astonished, “How is it possible?” these were the things that we used to ask. But now, we use them for conveniences as we are now used to them. In fact, sometimes we can call long distance. In fact, we get call from long distance. That is the way we are now.

**Our hearing can be damaged.**




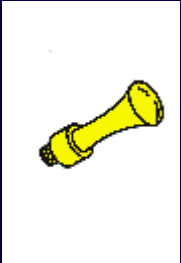



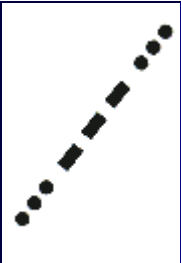
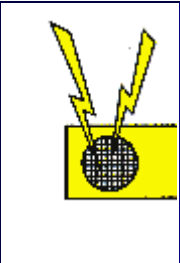










## Speaking without Sounds and Sight



Use the space below to draw a two or three word message in both sign language and Braille. Use the alphabet signs above to help.

On the next page are ways we can communicate without speaking. Talk with a class mate to create a story that uses one of these methods to help someone in trouble. Write and illustrate a story that uses one of these methods to communicate.



			
Red Star Shells	Fog Horn Continuous Soundings	Flames on A Vessel	Gun Fired at Intervals of One Minute
			
Orange Background Black Ball & Square	SOS	"Mayday" by Radio	Parachute Red Flare
			
Dye Marker (any color)	Code Flags November Charlie	Square Flag and Ball	Wave Arms
			
Radio-Telegraph Alarm	Radio-Telephone Alarm	Epirb	Smoke

**In Trouble:** *The brief stories relate to the accounts of being in trouble when traveling by Olive Pascall and Annie C. Gordon.*

There are sounds that are important especially when you are in distress or danger or if something had happened and you need to get someone's attention. We were at camp in the delta during rapping season. I heard the sound of three shots of a gun and knew something had happened. Sounds travel a long distance at that time of year and it was a signal to get our attention. We listened and again there were three shots and we knew the direction and it was a neighboring camp. So we traveled by boat and sure enough when we arrived at the camp someone needed help.

Again, another time we were walking away from our rapping camp on the West Channel and there were three shots. Immediately we knew it was a signal to return to camp because something had happened. We returned to camp quickly and one of the children needed to be taken to Aklavik because someone had poked a sharp stick through their lip.

Another time we were traveling by boat in the summer to Shingle Point on the arctic coast. We had come out onto the ocean and it was very foggy. We were away from the coastline and lost our direction at sea. There was nothing to give us any sense of direction. We knew we were not too far away from Shingle and that the people camped at Shingle would have been able to hear our outboard motor. We stopped the motor and listened. We heard three shots of the gun and tried to make out what direction it was coming from. We turned on the motor and continued to go in the direction we thought was right. We traveled a bit more in the fog in what we thought was the right direction and came to Seagull Island. We knew it is a ways from Seagull to Shingle but we had a sense now of which way to go. We turned off the motor and listened again. People at Shingle knew we would have been lost because we turning the motor on and off to listen and looking for direction. We listened again and again there were shots. This confirmed which way we should go and we then we headed off. So, some sounds are important. They tell you there is danger. They tell you to take notice.

## Sounds of Animals

1. With a classmate, try to make the sounds these animals make.



2. Every animal makes a variety of sounds. Using a dog or cat as an example, list the kinds of sounds it makes and when and why it makes these sounds.

Sounds Made by a	When It Makes This Sound?	Why Does It Make This Sound?

3. Research to find out how these animals make sounds.

Animal	How They Make Sounds
Cricket	
Mosquito	

4. Research to find out how these animals hear.

Animal	How They Hear
Whale	
Fish	
Snake	

**The Sounds of Geese:** *This story is an adaptation of a story told by Thomas Selamio and one many hunters have experienced in the arctic.*

When I was a young boy I remember listening to my father calling birds when we were hunting on the coast in the northern Yukon. We would always hunt in October when the geese were flying south after breeding on the arctic islands over the summer. On some days there were thousands and thousands of geese.

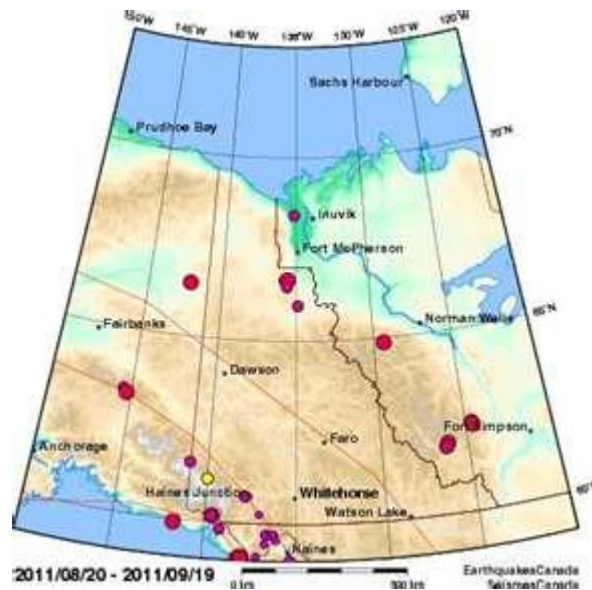


I didn't think he was calling birds. It was more like he was just trying to mimic or copy the birds. He would hear a bird calling and then he would call back at the bird with the same call he had heard. It was like someone calls your name, and then you call back saying their name exactly the same way. One was the 'nerlek' or snow goose. It makes the sound 'ner-lek' and that is why we called the snow goose 'nerlek'. It was not a hard sound to copy.



It was only later I realized that he was learning to copy the sounds because that was how you could call them in when you were hunting. We would take shelter among some brush near the coast and when the geese were coming in off the coast you would call them: "nerlek....nerlek....nerlek.....nerlek."

They would hear this call and come towards the call. Then you would shoot. I remember seeing them come in right to where we were when he was calling. Sometimes other people would be with us, and we would all call. The geese would come right in to where we were and we would shoot them out of the air. It was better to do this on days when it was overcast. When it was overcast the geese would fly lower under the clouds. If it was clear, the birds would be traveling to high and you would not be successful. Often there was low fog and this was even better. Then the geese would travel even closer.



I can remember that if a goose was shot it would come falling down to the ground near where we were hiding. I'd run out to get them and sometimes they were still alive and try to run away. I'd chase them along the coast and catch them. Sometimes they would be able to take off and fly away and you would not get to them.

I enjoyed this time. It was enjoyable to be on the coast and hunt geese.

There were other sounds we called as well because these were the sounds and names of the bird.