

Traditional Stories about Wind _____

Levels



Grades K-4

Overview:

During this activity, students learn about traditional ways of observing the wind without using weather instruments.

Objectives:

The student will:

- ask their parents or an Elder about traditional ways of observing the wind without using weather instruments; and
- share their responses with the class.

GLEs Addressed:

Science

- [3-4] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.
- [3] SA2.1 The student demonstrates an understanding of the attitudes and approaches to scientific inquiry by answering “how do you know?” questions with reasonable answers.
- [3] SF1.1-SF3.1 The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by exploring local or traditional stories that explain a natural event.
- [4] SF1.1-SF3.1 The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by connecting observations of nature to a local or traditional story that explains a natural event (e.g., animal adaptation, weather, rapid changes to Earth’s surface).

Whole Picture:

Integrating western science with traditional Native knowledge creates science curriculum that is relevant to Alaskan youth.

In the Yupik culture, for example, understanding the wind is a part of learning vital hunting and outdoor survival skills. By observing the environment, wind direction can be determined without tools.

Inupiaq Elder Jonas Ramoth said people rely on environmental cues.

“We talk about wind in terms of how its handling visible stuff like grass in summer and snow drifts in winter. If you’re home and look out the window, if smoke from a neighbor’s stack is leaning over, you know there’s a little bit of a breeze or maybe the smoke is moving vigorously. If snow is drifting on the ground, the wind is strong, a surface wind. In storm conditions, visibility is affected and you can’t see across the street - on a snow machine, you can’t see your skis. 20-25 mph winds are a storm. 30mph winds are a blizzard and even if it’s warm, a fine powder of snow finds its way in through your clothes. If you go out, you need a facemask and goggles. Its better to stay put, stay home.”

Western science may use instruments such as wind vanes to measure direction and anemometers to measure wind speed. The Beaufort Scale uses visual cues to aid in identifying direction and speed.

Vocabulary Words:

beckon - to make a sign or signal by moving the hand or head (to call someone or something to you)

informally - without ceremony, casual

qjunaurlauqtuq - (Inupiaq) “he’s beckoning the storm”

reliable - something that can be trusted

Many indigenous groups have devised their own ways of describing wind conditions in order to evaluate weather conditions and plan activities. The Yupi'k story Raven Makes Wind tells the origin of wind.

Raven Makes Wind
By Darcy Kameroff

It was a hot summer day in July. Raven was with his mate who was caring for her young. She was complaining to him about how mosquitoes were always bothering her. Since he was a loving mate, he tried a couple of techniques to help keep them away.

First he went to the beach, gathered a cup of mud, and brought it back to his mate who was being pestered by the mosquitoes. Even though she didn't like the idea of mud all over her body, her mate insisted she put it on. After she covered herself with mud there were no longer any mosquitoes bothering her.

After a few hours the mud had dried and she looked like dirt. But she was so stiff she could barely move. She did not like the feeling and scolded her husband. So he suggested she take a bath and never use it again.

Raven was still determined to find a solution to his wife's problem. All through the night he tried to think of what he could do so the mosquitoes would not bother his mate. Finally he thought of something that would "blow away" his mate! He would make wind which would keep all the bugs away from her.

The raven did this by calling forth the North, South, West and East winds. He offered to exchange some of his valuable items for some of their wind. They all agreed to the deal and gave raven four bags. They specifically told raven to open the bag when he woke up in his house.

The next day as soon as Raven woke up he opened each bag. And when his wife went outside she found it was very windy, and did not complain anymore about the mosquitoes bothering her.

From then on the wind would blow from every direction, and ravens were seen on trees enjoying the wind because it kept the mosquitoes away.

Materials:

- STUDENT WORKSHEETS:
 - Level I "Ask an Elder about the Wind"
 - Level II "Qiunaurauqtuq"

Activity Procedure:

1. Share the following quote from Inupiaq Elder Jonas Ramoth:

"In the winter in Selawik, if it's clear and cold, -20 degrees or -30 degrees, maybe there are a few clouds but it's nice and calm. The wind isn't supposed to blow. If the wind starts to blow when it's not supposed to, people gathered in the store will say 'Ooo, cold'. In Inupiaq they say 'qiunaurauqtuq,' which means 'he's beckoning the storm.' If it is windy, it will be stormy--blowing, drifting snow. It makes you decide to stay home. Animals will stay home too. This is very reliable."
2. Distribute Student Worksheet "Ask an Elder about Wind" to Level I students.
3. Distribute Student Worksheet "Qiunaurauqtuq" to Level II students.
4. Invite an Elder to the classroom for the students to interview, or, if that is not possible, ask students

to speak with their parents or an Elder about the questions on their worksheets.

5. Explain that students will need good listening skills for this exercise. Ask them what it means to be a good listener. Some good responses include: be still and look at the person who is talking, ask questions about the story, don't interrupt, take notes (for students who can read and write), and so on.
6. After most students return with completed worksheets, lead a classroom discussion. This discussion will give students an opportunity to express themselves in their own words. It also will give students who were not able to interview their parents or Elders the chance to fill in their student worksheets.
 - (a) Without weather vanes, how can you tell what direction the wind is blowing?
 - (b) Without anemometers, how can you tell how fast the wind is blowing?
 - (b) Is knowing about the wind important for people about to hunt or travel? Why?

Answers to Student Worksheets:

Student responses may vary.

Name: _____

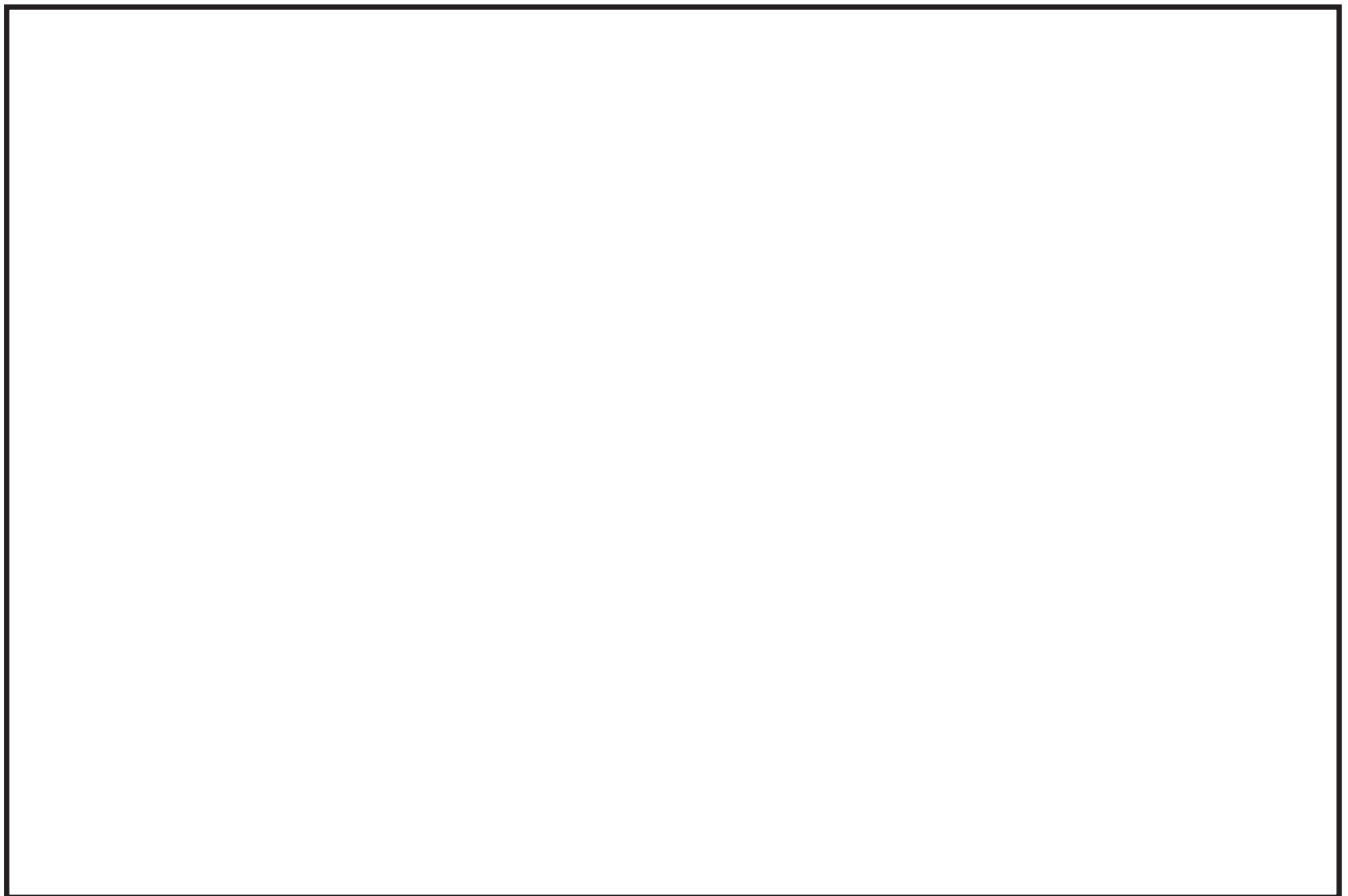
Ask an Elder about the Wind

Student Worksheet



Ask your parents or an Elder: What clues do you use to tell you the wind is blowing when you have no weather instrument?

In the box below, draw a picture of an animal trying to stay out of the wind. What can you draw to show the wind is blowing in your picture?



Write the name of the Elder with whom you spoke.

Explain your drawing to your teacher or a classroom partner.

Name: _____

Qiunaurauqtuq

Student Worksheet

Level



Ask your parents or an Elder these questions:

(a) What clues do you use to tell you what direction the wind is blowing when you have no weather vane?

(b) What clues do you use to tell you the wind is blowing hard when you have no anemometer?

(c) You want to hunt today. You look up and see the clouds are blowing very fast. All the dogs in the village are curled up and there are no fresh animal tracks near your house.



Do you still go hunting? Why or why not?

Name the Elder with whom you spoke: _____