

Elder Quote/Belief:

“If crescent moon is tilted, it could drain water. A sign it will rain. Tilted moon, where water can drain out. Talking about the crescent moon, if the moon is crescent it leans towards one side or the other. If it will look like the crescent moon is leaning backwards, it’s holding back the weather. If the crescent moon is leaning forward it’s dumping out the weather.” -Patience Faulkner, Cordova.

Grade Level: PreK-2

Overview:

Traditional Sugpiaq people not only relied on their observation of the sun, moon and stars to make weather predications but also as indicators of hunting/ gathering seasons. There were no calendars back then so the ancestors would observe the moon as a way keeping track of the days because they did not know about months but only that days led into seasons. In the summer, the days are longer. As summer turns to fall the days begin to get darker because the sun is lowering in the sky. When spring arrives, the sun begins to gets higher in the sky and summer is getting closer.

For example, in Port Graham, residents know when the seasons change by the elevation of the sun in the sky. When summer is turning into fall the sun will get lower each day than fall turns into winter the sun will be lower and will set behind the mountain. Local traditional ecological knowledge (TEK) in the community is to wait and watch for the full moon. When there is a full moon, the moon’s gravitational force is a lot stronger and creates the minus tides. Minus tides allows us to collect the seafood that we traditionally eat.

For weather forecasting, there are many indicators such as when there is a ring around the sun or moon it is an optical effect and known as a Sun or Moon Dog.



The Elders have shared their TEK when we see the Moon or Sun Dog it is a sign bad weather is coming.

Standards:

<i>AK Cultural:</i>	<i>AK Content Science:</i>	<i>CRCC:</i>
E1 Recognize and build upon the inter-relationships that exist among the spiritual, natural, and human realms in the world around them, as reflected in their own cultural traditions and beliefs as well as those of others	B4 Develop an understanding of motions, forces, their characteristics and relationships, and natural forces and their effects.	S8 Students should be able to learn/observe the weather and tides.

Lesson Goal:

The students learn about how our ancestors used their observation of the sun, moon and stars as indicators for weather prediction.

Lesson Objective(s): Students will:

- Learn the Eyak and Sugt'stun vocabulary words for this lesson
- Learn about a traditional Kodiak Sugpiaq story.
- Create a mask that represents the traditional Sugpiaq story

Vocabulary Words:

Sugt'stun Dialects

English:	Prince William Sound:	Lower Cook Inlet:	Eyak:
Sun	Macaq	Macaq	
Moon	Tanqik	Ingik	
Day	Ehnuq	Erneq	
Night	Unugtuq	Unuk	

Materials/Resources Needed:

Paper plates, single hole punch, hole punch, reinforcing hole stickers, elastic string, crayons or colored pencils.

Books:

- *Tlingit Moon and Tide, Teaching Resource: Elementary Level.* By Dolly Garza, University of Alaska Sea Grant
- *Old Belief Stories in Port Graham*, page 28 "The Fork and the Spoon."

Websites:

<https://www.youtube.com/watch?v=cbk9tcZaeb8> for the video about *The Girl who married the Moon*, a Kodiak traditional story

Teacher Preparation:

- Invite and Elder or Recognized Expert into the classroom who can share a story regarding weather predictions by observing the sun, moon and stars.
- Compile the materials and supplies needed.
- Pre hole punch on each side of the paper plate and use the reinforcing stickers, then tie the strings in each hole.

- Pre-cut elastic strings, two for each student.
- Review the Tlingit Moon and Tide Teacher Resource book.
- Locate and review the “Fork and the Spoon” story from the Old Beliefs Stories in Port Graham
- Set up the YouTube video “The Girl Who Married the Moon” a traditional Kodiak Alutiiq Story.

Opening:

A Long time ago, we did not have electricity, which meant there was no radio or television. How do you think our ancestors predicted the weather? (Allow time for answers.) The ancestors’ traditional ecological knowledge was developed by careful observations over many years and enabled them to successfully forecast weather. What types of indicators did they rely on to forecast the weather? (Allow time for answers.) Listen to a few of their beliefs:

- *“If there is a circle around the moon it means that there is going to be bad weather.” Jean Moonin, Port Graham*
- *“Every day he has to check the weather by watching the stars. When the stars twinkle slowly it’s going to be a fine day, no wind tomorrow. When the stars flutter fast that means it’s going to be windy the next day.” Sergius Moonin, Nanwalek, Aleksandrovsk Vol. 2 – Old Beliefs.*
- *“Full moon means there will be big tides and that indicates minus tides for octopus hunting.” Stella Meganack, Port Graham.*

Today, we will be learning about the traditional way of weather forecasting by observing the sun, moon and stars and then create a mask to represent the sun, moon or stars!

Activities:

1. Introduce the Elder, if available, and remind the students to use best manners and be very respectful. Please listen carefully to what the Elder wants to share with us that will help us understand traditional weather forecasting.
2. If an Elder is not available, read the story from “The Fork and the Spoon.”
3. Show the students the video “The Girl Who Married the Moon.”
4. Discuss what they learned from the Elder, story and video. Some questions to ask the students could be;
 - What were the main indicators to forecast weather?
 - Was there a connection with the story, video?
5. Distribute the paper plate and strings to each student and ask the students to repeat the Sugt’stun or Eyak words as you say them.
6. After everyone has their materials, have the students place their paper plate to their face and locate their eyes. Assist the students if needed, to mark where the student points for eyes and then cut out the holes.
7. After the eye holes are cut, then ask the students to design and color their mask. Display a copy of the mask and help draw designs like the masks from the video they watched.
8. On the inside of the mask the teacher can help write an Elder quote or belief listed from above.

9. Tie the strings around to fit the student's head.



Assessment:

- Students are able to correctly pronounce Sugt'stun and Eyak Words.
- Students demonstrated comprehension of the story by recalling the plot.
- Students completed a mask that represented the story.

