



Math-Wooch Yáx̄ Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Tlingit Language & Cultural Significance:

Students will learn to count to twenty in Tlingit. Then they will use the essential skills they are learning in K/1 math and apply them in language class, to refine their ability to think in Tlingit.

Students will also learn about the original Tlingit counting system based on 20. That one human is the literal translation of tleikáa, twenty (ten fingers and ten toes). They will also hear about the traditional Tlingit economy, which was based on trade.

Elder/Culture Bearer Role:

An elder or culture bearer may be invited into the class to share a story or oral history about trade. Students will make the connection that in Tlingit history there was no dáanaa (cash economy) and that all items were traded, thus being able to count and keep an accurate record of trade items enabled our ancestors to become wealthy and thrive in the harsh environment.

The elder may also lead a small math game during stations. This will build communication in Tlingit among elders who are our fluent speakers and young children. The elder may help with pronunciation of the vocabulary words, as well as teach phrases that come naturally during game conversation. This will be a fun opportunity for both elder and students to learn together.

Gunalchéesh to Selina Everson - Kaséix̄, Lillian Austin - Yax̄dulák̄, and Irene Cadiente - Jigeit Tláa who assisted in the Tlingit translations and helped pilot the lessons at Harborveiw Elementary School in K-5 classrooms.

Overview:

The first lesson is to teach students how to count in Tlingit focusing on correct pronunciation of the words (tone marks, guttural sounds, etc.) and for an elder to share their cultural knowledge about trade. The lesson focuses on ordinal counting (up to 20) by playing a game called "Hóoch'á" and number recognition by playing Memory. At the end of class teach the counting song - Yaa Ndastóow Daa Shéeyi.

The second lesson continues building on basic counting skills through games (remote control race car race) and TPR. The students may become the teacher and give commands to the class in activity 3. At the end of

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

class sing Yaa Ndaastóow Daa Shéeyi and then teach the song Keijín Yateeyí Kéetx' Xaatéen.

The third lesson starts with a review of numbers and counting. Then the students will add two numbers together using manipulatives. At the end of class sing the Five Frogs Song.

The fourth lesson starts with a review of counting and then students will get into small groups for stations. Each station should be approximately 5 mins long. Three to four stations will be set up. At the end of class sing the counting songs

The fifth lesson will be to assess the kids' ability to count to 20 in Tlingit and to add two numbers correctly (under the sum of 12, using 2 dice and manipulatives). This will be done in stations. Set up Math stations like in the fourth lesson; however add some fun games like Uno, War, or Candy Land. This can review and reinforce colors or be a good introduction into teaching colors. Remember to set the expectation for the students to count in Tlingit.

Additional Language Resources:

Woosh Yáx Yaa Datóowch - Tlingit Math Book by Hoonah High School and Katherine Mills

Replacing Thing-A-Ma-Jig: The Developmental Language Process by Jim MacDiarmid

Lingít X'éináx Sá! Say it in Tlingit: A Tlingit Phrase Book Edited by Richard Dauenhauer and Nora Marks Dauenhauer

Dictionary of Tlingit by Keri Edwards

Learning Lingít Naturally: TPR Lessons for Beginners by Bessie Cooley, Hans Chester, & Roy Mitchell - Sealaska Heritage Institute

Beginning Tlingit by Richard Dauenhauer & Nora Marks Dauenhauer Sealaska Heritage Foundation

Sealaska Heritage Website - Numbers Interactive Game

http://www.sealaskaheritage.org/programs/language_resources.htm

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

All Vocabulary for Entire Unit

Nouns - Numbers

tlél yax dustoow	zero	jinkaak ka tléix'	eleven
tléix'	one	jinkaak ka déix	twelve
déix	two	jinkaak ka nás'k	thirteen
nás'k	three	jinkaak ka daax'oon	fourteen
daax'oon	four	jinkaak ka keijín	fifteen
keijín	five	jinkaak ka tleidooshú	sixteen
tleidooshú	six	jinkaak ka daxadooshú	seventeen
daxadooshú	seven	jinkaak ka nas'gadooshú	eighteen
nas'gadooshú	eight	jinkaak ka gooshúk	nineteen
gooshúk	nine	tleikáa	twenty
jinkaak	ten		

Nouns- Number of times, counting by 2s, 3s, 5s

tléix' dahéen	once
daxdahéen	twice
nas'gidahéen	three times
daax'oon dahéen	four times
keijín dahéen	five times
tleidooshú dahéen	six times
dáxgaa	two by two
nás'gigaa	three by three
keijíngaa	five by five

Nouns- Body Parts & Lesson Materials

i jín	your hand
yee gushká	all your laps
i gushká	your lap
yee jín	all your hands
xóots	brown bear
xíxch'	frog
Lingít' Aaní Yadaa	Around the world
yoot kadul'it al kaa át	dice

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Verb to Count Imperative Form

Naystóow	You all count
Neestóow	You count
Nás'gidé naystóow	You all count to 3.
Nás'gidé neestóow.	You count to 3.
Tleikáade dáxgaa naystóow.	You all count to 20 by 2s.
Tleikáade dáxgaa neestóow.	You count to 20 by 2s.
Tleikáade, Keijíngaa naystóow.	You all count to 20 by 5s.
Kux nayistóow.	You all count backwards.
Kux neestóow.	You count backwards.
Jinkaadax kux naystóow.	You all count backwards from 10.
Jinkaadax kux neestóow.	You count backwards from 10.
Nás'k ka déix wooch.een naystóow.	3 and 2 you all count them together.
Nás'k ka déix wooch.een natóow.	3 and 2 you count them together.

TPR Commands

Nas'gidahéen kei yee kduk'én.	You all jump three times.
Nas'gidahéen kei eeshk'én.	You jump three times.
Daxdahéen, yóo áa yax yinák.	You all turn in a circle twice.
Daxdahéen, yóo áa yax hán.	You turn in a circle twice.
Daxdahéen yee jintáak nayt'acht'.	You all clap your hands twice.
Daxdahéen i jintáak nat'acht'.	You clap your hands twice.
Daxdahéen yee gushká nayt'acht'.	You all slap your thighs two times.
Daxdahéen i gushká nat'acht'.	You slap your thighs two times.
Ldakát uhaan, at yinák tliyéix', jinkaadé naystóow.	You all walk in place and count to 10.
Tliyéix' yaa gagú.	You walk in place.

Phrases used during lesson activities

Hóoch'.	It's all gone.
Eesháan.	Poor You.
Aadóoch sá yakgwadláak?	Who will win it?
Yaxwaadlaak.	I won it.
Ayaawadlaak.	He/she won it.
Yak'éi áwé.	That is good.
Ax adée!	Oh wow!

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

I tundatáani	Memory
Wooch udiyaa gé?	Is that a pair?
Aaá.	Yes.
Tléik'.	No.
Wé x'úx' yóo áa yax tí.	Turn over the paper.
I éet <u>koowahaa</u> .	Your turn.
Góok!	Go!
Lingít <u>X'éináx</u> Sá!	Say it in Tlingit!
Kei kal'it.	Throw them. (roll the dice)
Keijín Yahaayí kaadé <u>naykoox</u> .	You all drive to the picture of 5.
Tláakw <u>naskoox</u> .	Drive fast!
<u>Gaykí</u> .	You all sit down.
<u>Ganú</u> .	You sit down.

Underlying Form of the Verb to count

_____ <u>ka</u> _____ wooch.een natóow.	_____ and _____ you count them together.
_____ <u>ka</u> _____ wooch.een nayistóow.	_____ and _____ you all count them together.
_____ <u>de dáxgaa</u> naystóow.	You all count by 2s to _____.
_____ <u>de keijíngaa</u> naystóow.	You all count by 5s to _____.
Tleikáade <u>dáxgaa</u> neeystóow.	You all count to 20 by 2s.
_____ <u>de dáxgaa</u> neeystóow.	You all count to _____ by 2s.

Underlying Form of TPR Commands

_____ <u>kéi</u> yee <u>kduk'é</u> n.	You all jump _____ times.
_____ <u>kei</u> eeshk'é.n.	You jump _____ times.
_____ <u>yóo áa yax</u> yiná.k.	You all turn in a circle _____ times.
_____ <u>yóo áa yax</u> hán.	You turn in a circle _____ times.
_____ <u>yee jintáak</u> nayt'ácht'.	You all clap your hands _____ times.
_____ <u>yee goosh</u> káx' nat'ácht'.	You all slap your thighs _____ times.
_____ <u>Yahaayí</u> kaadé <u>naykoox</u> .	You all drive to the picture of _____.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

All Materials for Entire Unit

- ◆ number posters
- ◆ number memory cards
- ◆ dice
- ◆ Tlingit Number Playing Cards
- ◆ Katherine Mills Math Book
- ◆ Flash Lights
- ◆ Animal manipulatives frogs & bears
- ◆ Poster of Songs: Yaa Ndstóow Daa Shéeyi, Keijín Yateeyí Kéet Xaatéen, and Keijín Xíxch' Xaatéen
- ◆ drums, rattles
- ◆ remote control race cars

Assessments

Pre-assessment: Verbal, ask the students how high they can count in Tlingit, listen to see how far the entire class can count together. If they are able to count far, you may breeze through the beginning lessons and they may start playing games in small groups quicker than if they are new to counting in Tlingit. If that is the case, start slow and play the games with the entire class until they are comfortable to count independently in small groups.

Ongoing Assessment: Assess for students comfort level in counting and their ability to stay in the language. Also look for skip counting, starting to count up from a number other than one all in Tlingit. These are skills all K-1 students are building in English. So keep encouraging students to count Tlingit.

Post-Assessment: Use the sheet provided to assess the student's ability to count and add in Tlingit, during Lesson 5 stations.

Alaska Cultural Standards for Students:

B1&2: Culturally-knowledgeable students are able to build on the knowledge and skills of the local cultural community as a foundation from which to achieve personal and academic success throughout life. Students who meet this cultural standard are able to:

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

- 1) Acquire insights from other cultures without diminishing the integrity of their own; and
- 2) Make effective use of the knowledge, skills and ways of knowing from their own cultural traditions to learn about the larger world in which they live;

D3: Culturally-knowledgeable students are able to engage effectively in learning activities that are based on traditional ways of knowing and learning. Students who meet this cultural standard are able to interact with elders in a loving and respectful way that demonstrates an appreciation of their role as culture-bearers and educators in the community.

E5: Culturally-knowledgeable students demonstrate an awareness and appreciation of the relationships and processes of interaction of all elements in the world around them. Students who meet this cultural standard are able to recognize how and why cultures change over time;

State Standards for World Languages:

A4: A student should be able to communicate in two or more languages, one of which is English. A student who meets the content standards should

- 3) Use two or more languages effectively in real life situations; and
- 4) Use two or more languages to learn new information in academic subjects.

B2&3: A student should expand the student's knowledge of peoples and cultures through language study. A student who meets the content standard should:

- 2) Learn about and experience deep characteristics of the culture, including art, cuisine, dance, dress, geography, history, music, and literature; and
- 3) Learn about and experience deep characteristics of the culture, including folkways, mores, laws, traditions, customs, and patterns of behavior.

Math Power Standards:

The student demonstrates conceptual understanding of numerals by:

- KN-3) building numbers to 20
- KN-4) using one to one correspondence up to 20
- KN-5) identifying the corresponding numerals from a set of 1 to 10

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

The student demonstrates conceptual understanding of mathematical operations by:

KN-6) given a story problem, adding whole numbers using up to ten objects
KN-7) using manipulatives, models, pictures, or language to share thinking about strategies and solutions to problems with peers. (Children should be able to use at least one of these representations of their thinking, and they should be exposed to all.)

1N-6) given a story problem, adding and subtracting whole numbers using up to 20 objects.

The student demonstrates understanding of number theory by:

KN-8) counting by tens to 100.

1N-8) counting by twos to 20 and by fives and tens to 100.

The student accurately solves problems, including real-world situations, by:

KEC-2) adding whole numbers using up to ten objects.

1EC-2) adding three single-digit numbers with sums to 20 or less.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch

K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 1 ~ Count from 0 to 20

Objectives:

A student will be able to...

- ◆ count to 20 in Tlingit starting at 0
- ◆ count backwards to 0 in Tlingit starting at 10
- ◆ respectfully listen to an elder share history about trading
- ◆ sing Yaa Ndstóow Daa Shéeyi

Time: 30 mins

Materials:

- ◆ number memory cards
- ◆ number posters
- ◆ Yaa Ndstóow Daa Sheeyi Poster, drum

Tlingit Vocabulary:

Nouns

tlél yax dustóow	zero	jinkaath ka tléix'	eleven
tléix'	one	jinkaath ka déix / déex	twelve
déix / déex	two	jinaath ka nás'k	thirteen
nás'k	three	jinkaath ka daax'oon	fourteen
daax'oon	four	jinkaath ka keijín	fifteen
keijín	five	jinkaath ka tleidooshú	sixteen
tleidooshú	six	jinkaath ka daxadooshú	seventeen
daxadooshú	seven	jinkaath ka nas'gadooshú	eighteen
nas'gadooshú	eight	jinkaath ka gooshúk	nineteen
gooshúk	nine	tleikáa	twenty
jinkaath	ten		

Phrases

I tundatáani	Memory
Wé x'úx' yóo áa yax tí.	Turn over the paper.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Woosh udiyaa gé?	Are they a pair?
Aaá.	Yes.
Tléik'.	No.
Hóoch'.	All gone. No more.
Eesháan.	Poor You.
Gaykí.	You all sit down.
Ganú.	You sit down.
Aadóo sá yakgwadláak?	Who will obtain it (win)?
Yaxwaadlaak.	I obtained it (won).
Ayaawadlaak.	He/she obtained it (won).
Yak'éí áwé.	That is good.
Ax adée!	Oh wow!
Lingít Aaní yadaa.	Around the world
I éet koowahaa.	Your turn.

Verb Form: Imperative (Command) to count

Nayistóow	You all count.
Neestóow	You count.
Nás'kde nayistóow.	You all count to three.
_____de nayistóow.	You count to _____.
Nás'kde neestóow.	You count to three.
_____de neestóow.	You count to _____.
Jinkaadax, kux nayistóow.	You all count backwards from ten.
_____dax, kux nayistóow.	You all count backwards from _____.
Jinkaadax kux neestóow.	You count backwards from ten.
_____dax kux neestóow.	You count backwards from _____.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx̄ Yaa Datóowch
K-1

"Drink from the vessel of Traditional Knowledge."

Yaa Ndaastóow Daa Shéeyi

Written by David Katzeek and George Holly

Vocables:

hei hei haa

hei i yaaw

hei

hei hei

hei I yaaw

Yaa ndastóow daa shéeyi

hei

hei hei

yaa ndastóow

Tléix' tléix' tléix'

Tléix' áyá

Tléix'

Tléix' tléix'

Tléix' áyá

repeat once

Vocables

Déix̄ déix̄ déix̄

Déix̄ áyá

Déix̄

Déix̄ déix̄

Déix̄ áyá

repeat once

Vocables

Nás'k nás'k nás'k

Nás'k áyá

Nás'k

Nás'k nás'k

Nás'k áyá

repeat once

Vocables

Daax'oon daax'oon

Daax'oon áyá

Daax'oon

Daax'oon áyá

repeat once

Vocables

Keijín keijín

Keijín áyá

Keijín

Keijín áyá

repeat once

Vocables

Hóoch'á

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 1 ~ Counting 0 to 20

Time: 30 mins

Activities:

Activity 1 - Introduce Counting 0-20 (5 mins)

Ask the students if they can count to 20. Then lead them in counting in English to 20, remember to include zero. Then ask them if they can count in Tlingit. Lead the students in counting from 0 to 10. If this is an easy task for them continue to 20, however, do not go too fast, constantly assess the students for level of understanding. For example if you are teaching only a Kindergarten class that has never heard Tlingit count only to five. Once you lead counting 3-4 times, move on to the next activity.

Activity 2 - Hóoch'á (10 mins)

Play the game Hóoch'á. Have the students stand in a circle, pick one to start counting at zero, the next friend says one, the next friend says two, and so on up to five. After five is said the next friend says Hóoch'á and sits down. Start over at zero. Continue playing until only one friend is left standing. Use your fingers or the large number cards to assist in counting.

Next play the game counting backwards from three to zero, after zero is said the next friend says Hóoch'á and sits down. Students sitting usually get restless so play the game up to three times.

Activity 3 - Memory (10 mins)

Use the large number cards first (0 to 10) and lead the entire class in a game of memory, challenge the students to only speak in Tlingit. Encourage them to count up to their number in Tlingit. Replay as time allows.

Activity 4 - Elder Sharing (5 mins)

Invite a cultural bearer, fluent speaker, or Tlingit elder to share about Trade in the Tlingit culture. Explain to kids the importance that trade played in the survival of the Tlingit people.

Activity 5 - Sing (5 mins)

Sing the song Yaa Ndastóow Daa Shéeyi.

Assessment:

During the lesson watch for the students' comprehension of counting and correct pronunciation. Start Lesson 2 with a review of the sounds they are having difficulty with.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Additional Optional Activities:

If the students are already excellent counters you may move into the Lesson 2 vocabulary early (count by 2s or 5s), thus making counting and Hóoch'á more challenging. You may also split them into small groups and have them play memory so more students have the opportunity for a turn.

nás'k

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 2 ~ Total Physical Response (TPR Commands)

Objectives:

A student will be able to...

- ◆ count backwards from ten to zero
- ◆ count by 2s to 10 and by 5s to 20
- ◆ respond correctly when given a TPR command
- ◆ give TPR commands to the class

Time: 30 mins

Materials:

- ◆ dice
- ◆ Keijín Yateeyí Kéet Xaatéen song poster
- ◆ remote control cars
- ◆ Number Posters

Tlingit Vocabulary:

Numbers - see Lesson 1 for numbers 1 - 20

tledahéen	once
daxdahéen	twice
nás'k dahéen or nas'gidahéen	three times
daax'oondahéen	four times
kejindahéen	five times
tleidooshudahéen	six times
dáxgaa	two by two
nás'gigaa	three by three
keijíngaa	five by five
yee jín	your all hands
i jín	your hand
yee gushká	your all thighs
I gushká	your thighs

TPR Commands & Imperative (command) Form of to count

Nas'gidahéen kéi yee kduk'én.	You all jump three times.
_____ kéi yee kduk'én.	You all jump _____ times.
Nas'gidahéen kei eeshk'én.	You jump three times.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

_____ kei eeshk'én.	You jump _____ times.
Daxdahéen, Yóo áa yax yiná <u>k</u> .	You all turn in a circle twice.
_____ yóo áa yax yiná <u>k</u> .	You all turn in a circle _____ times.
Daxdahéen, yóo áa yax hán.	You turn in a circle twice.
Daxdahéen yee jintáak nayt'á <u>ch</u> t'.	You all clap your hands twice.
Daxdahéen i jintáak nat'á <u>ch</u> t'.	You clap your hands twice.
Daxdahéen yee gushká nayt'á <u>ch</u> t'.	You all slap your thighs two times.
Ldakát uhaan at yiná <u>k</u> tliyéix' jinka <u>at</u> dé nayistóow.	You all walk in place and count to 10.
Tliyéix' yaa gagú.	You walk in place.
Jinka <u>at</u> dáx <u>k</u> ux nayistóow.	You all count backwards from ten.
Jinka <u>at</u> dé, dáx <u>g</u> aa neestóow.	You all count by 2s to ten.
Tlei <u>k</u> áade, Keijí <u>n</u> gaa nayistóow.	You all count by 5s to twenty.
Kei kal'it.	Throw them. (roll the dice)
Keijín Yahaayí ka <u>a</u> dé nay <u>k</u> oo <u>x</u> .	You all drive to the picture of 5.
Tl <u>a</u> akw nask <u>o</u> o <u>x</u> .	Drive fast!

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Keijín Yateeyí Kéet Xaatéen.

By Selina Everson, Nancy Douglas, and Hans Chester

Éekdei yaa ntoo.át',
daa sá iyatéen?
Keijín yateeyí kéetx' xaatéen,
Keijín yateeyí kéetx' xaatéen,
Keijín yateeyí kéetx' xaatéen.
Tléix' yateeyí aa
De yíndei woox'aak.

Éekdei yaa ntoo.át',
daa sá iyatéen?
Daax'oon yateeyí kéetx' xaatéen,
Daax'oon yateeyí kéetx' xaatéen,
Daax'oon yateeyí kéetx' xaatéen,
Tléix' yateeyí aa
De yíndei woox'aak.

Éekdei yaa ntoo.át',
daa sá iyatéen?
Nás'k yateeyí kéetx' xaatéen,
Nás'k yateeyí kéetx' xaatéen,
Nás'k yateeyí kéetx' xaatéen.
Tléix' yateeyí aa
De yíndei woox'aak.

Éekdei yaa ntoo.át',
daa sá iyatéen?
Déix yateeyí kéetx' xaatéen,
Déix yateeyí kéetx' xaatéen,
Déix yateeyí kéetx' xaatéen.
Tléix' yateeyí aa
De yíndei woox'aak.

Éekdei yaa ntoo.át',
daa sá iyatéen?
Tléix' yateeyí kéetx' xaatéen,
Tléix' yateeyí kéetx' xaatéen,
Tléix' yateeyí kéetx' xaatéen.
Tléix' yateeyí aa
De yíndei woox'aak.

Éekdei yaa ntoo.át',
daa sá iyatéen?
Ldakát has kéet
Ldakát has kéet
Ldakát has kéet
De yíndei has woox'aak.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx̄ Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 2 ~ Total Physical Response (TPR Commands)

Time: 30 mins

Activities:

Activity 1 - Review of Counting (5 mins)

Ask for one volunteer to help lead the review of counting. Start with counting from zero to twenty. Constantly assess and model pronunciation and ability to remember how to count. If the class needs more time to review play a quick game of Hóoch'á or Memory. If they are ready move to counting backwards from ten to zero, then counting by twos to twenty and by fives to twenty.

Activity 2 - TPR Commands (5-8 mins)

Give students TPR commands that focus on counting. This will also expose the students to hearing the numbers in a different noun form. Encourage the students to count the number of times they are doing the various commands (ie count to three, when you clap three times). Start with full group commands and assess the students ability to understand and then move to singular commands. For more TPR commands use: *Learning Lingít Naturally*.

Activity 3 - Students are the teacher & give TPR Commands (10 mins)

Have students stand in a circle and take out the dice. Ask if any of the students want to be the teacher and give commands. Have the student being the teacher roll the dice and give a TPR command. Assist student in giving command by modeling the TPR command patterns.

Activity 4 - Remote control cars race

Using remote control cars, place the number posters on the floor and say a number, have the students race to the number.

Activity 5 - Kéet Daa Shéeyi Song (5 mins)

Lead the students in singing the song Kéet Daa Shéeyi.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Assessment:

Continuously assess students ability to count. Expose them to counting by 2s and 5s, if they are ready have them count by 3s or another multiple. But if they are having difficulty in counting continue to build the basic ordinal counting skills.

Additional Optional Activities:

- ◆ Have students create a number book, 1-10. Prep the book by writing the number word on the bottom of the page.
- ◆ Play Knee Knock game, Balloon Volley Ball, or Flash Light Find from *Replacing Thing-a-ma-jig*.
- ◆ Play Simon Says, phrases for the game are in *Beginning Tlingit Lesson 4*.

nás'k

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 3 ~ Wooch Yáx Yaa Datóowch

Objectives:

A student will be able to...

- ◆ recognize and read numbers in Tlingit 0-20
- ◆ add two numbers together in Tlingit using manipulatives
- ◆ sing Keijín Xíxch' Xaateén Shéeyi

Time: 30 mins

Materials:

- ◆ Around the world playing cards
- ◆ dice
- ◆ manipulatives (frogs & bears used in lesson)
- ◆ Keijín Xíxch' Xaateén Shéeyi posters

Tlingit Vocabulary:

Nouns - Look at Lesson 1 Nouns for numbers

yoot kadul'it al <u>ka</u> át	dice
xóots	bear
xíxch'	frog

Verbs

Kei kageech	You toss it. (dice)
Nás'k <u>ka</u> déix wooch.een nayistóow.	3 and 2 you all count them together.
_____ <u>ka</u> _____ wooch.een nayistóow.	_____ and _____ you all count them together.
Nás'k <u>ka</u> déix wooch.een natóow.	3 and 2 you count them together.
_____ <u>ka</u> _____ wooch.een natóow.	_____ and _____ you count them together.

Phrases:

Lingít Aaní Yadaa	Around the world
I éet <u>kuwaháa</u> .	It is your turn.
Wa.é deis.	Your turn.



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Keijín Xíxch' Xaateén Shéeyi

Translated by Hans Chester & Nancy Douglas

Keijín Xíxch' Xaateén
gán kát has kéen
táax'aa has axáa
éits'k' éits'k'
áak'wde kei wjik'én
tle awsi.át' wé héen
daax'oon xíxch' áwé.
hei hei

tléix' xíxch' xaateén
gán kát uwanook
táax'aa axáa a
éits'k' éits'k'
áak'wde kei wjik'én
tle awsi.át' wé héen
yeedát tlél xíxch' ee áwé

hóoch' áwé

daax'oon xíxch' xaateén
gán kát has kéen
táax'aa has axáa
éits'k' éits'k'
áak'wde kei wjik'én
tle awsi.át' wé héen
nás'k xíxch' ee áwé
hei hei

I see five frogs
Sitting on a log
they ate a bug
yum yum
One jumped into the pool
where it is nice and cool
now there are four frogs
hei hei

nás'k xíxch' xaateén
gán kát has kéen
táax'aa has axáa
éits'k' éits'k'
áak'wde kei wjik'én
tle awsi.át' wé héen
déix xíxch' ee áwé
hei hei

déix xíxch' xaateén
gán kát has kéen
táax'aa has axáa
éits'k' éits'k'
áak'wde kei wjik'én
tle awsi.át' wé héen
tléix' xíxch' ee áwé

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 3 ~ Wooch Yáx Yaa Datóowch

Time: 30 mins

Activities:

Activity 1- Review of counting Whisper and Shouting (2 mins)

Have the students count by twos and fives to twenty. When counting by ones you can have students whisper the odd number and shout the even number.

Activity 2- Review of Number Recognition Around the World (8 mins)

Using the flash cards have the students sit in a circle and flash a card to the first two, whom ever says the number correctly first moves on to the next student. Go until one student completely goes Around the World (circle).

Activity 3 - Adding two numbers (10 mins)

Fill two ziploc bags with 1 die and 6 manipulatives each, (you could use different animals or colors and teach those as new nouns), for this lesson I am using bear (xóots) and frog (xíxch') manipulatives. Give two students each one bag, have them roll the dice and then give them the command to add how many frogs and bears there are all together.

Activity 4 - Songs

Sing Keijín Xíxch' Xaatéen Shéeyi. If time permits sing the other counting songs.

Assessment:

Look for students who only count in Tlingit to use them as models for speaking Tlingit, to encourage all students to only count in Tlingit.

Optional Activities:

- Activities from the book *Replacing Thing-a-ma-jig*. Remote Control cars race, give students two numbers and have them race to the answer. other fun games are Knee Knock or Flash Light Find.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

- For Activity 3: If you have enough manipulatives then give each student a bag, so all students can follow along with whom ever is tossing the dice.

nás'k

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch

K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 4 ~ Stations

Objectives:

A student will be able to...

- ◆ play math games in small group stations
- ◆ add two numbers in Tlingit
- ◆ count by twos in Tlingit

Time: 30 mins

Materials:

- ◆ Number memory cards
- ◆ bag of dice & manipulatives
- ◆ Computers open to Sealaska Heritage Website Interactive Games:
http://www.sealaskaheritage.org/programs/language_resources.htm

Tlingit Vocabulary:

Nouns

tlél yax dustóow	zero	tleidooshú	six
tléix'	one	daxadooshú	seven
déix / déex	two	nas'gadooshú	eight
nás'k	three	gooshúk	nine
daax'oon	four	jinkaak	ten
keijín	five	xóots	bear
yoot kadul'it al kaa át	dice	xíxch'	frog

Verbs

Nás'k ka déix wooch.een nayistóow.	3 and 2 you all count them together (add)
Nás'k ka déix wooch.een natóow.	3 and 2 you count them together
Kei kageech.	Roll the dice.

Phrases

Woosh udiyaa gé?	Are they a pair?
Aaá.	Yes.
Tléik'.	No.
Hóoch'	All gone
Yóo áa yáx tí wé x'úx'.	Flip over the card.
Yaxwaadlaak.	I won.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch
K-1

"Drink from the vessel of Traditional Knowledge."

Yaa wadlaak.	He/She won.
Eesháan.	Poor You.

nás'k

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 4 ~ Stations

Time: 30 mins

Activities:

Activity 1 - Review of Counting (4 - 5 Mins)

Lead the students in counting by twos to twenty, backwards from ten to zero and by fives to twenty.

Activity 2 - Stations (20 Mins)

Station 1: Adding with Language Teacher

Station 2: Hóoch'á with a fluent speaker

Station 3: Memory with independent small group

Station 4: Sealaska Heritage Website - Numbers Interactive Game

http://www.sealaskaheritage.org/programs/language_resources.htm

Activity 3 - Counting Songs (5 Mins)

Sing Kejín Yateeyí Kéet Xaatéen, Yaa Ndstóow Daa Shéeyi, and Kejín Xíxch' Xaatéen Shéeyi

Additional Optional Activities:

- ◆ Talk with the classroom teacher about what math games they are playing during math and translate the games into Tlingit and use those games as a station.
- ◆ In the small adding group use the remote control cars, give students two numbers and have them race to the answer.

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 5 ~ Math Games & Assessment

Objectives:

A student will be able to...

- ◆ play math games in small group stations
- ◆ add two numbers in Tlingit
- ◆ count by twos in Tlingit

Time: 30 Mins

Materials:

- ◆ Number memory cards
- ◆ bag of dice & manipulatives
- ◆ Teacher Assessment Sheet
- ◆ Optional Math Games: Uno, Candy Land, Chutes and Ladders, War, etc.
- ◆ Computers open to Sealaska Heritage Website Interactive Games:
http://www.sealaskaheritage.org/programs/language_resources.htm

Tlingit Vocabulary:

Nouns See Lesson 1 for Numbers

yoot kadul'it al <u>kaa</u> át	dice
xóots	bear
xíxch'	frog

TPR Commands & Phrases

Nás'k ka déix wooch.een naystóow.	3 and 2 you all count them together (add)
Nás'k ka déix wooch.een natóow.	3 and 2 you count them together
Kei kageech.	Roll the dice.
Lingít <u>X'éináx</u> Sá!	Say it in Tlingit!
Naystóow.	You all count.
Neestóow.	You count.



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Lesson 5 ~ Games and Assessment

Time: 30 mins

Activities:

Activity 1 - Counting Review

Review counting with the students, by playing Hóoch'á or Memory.

Activity 2 - Stations

Station 1: Assessment on Adding with Language Teacher

Use the Assessment Sheet and note if the student is able to:

1. count by 1s to 20
2. count by 2s to 20
3. count backwards from 10 to 0
4. Add two numbers correctly using dice & manipulatives

Station 2, 3, 4: Counting - Optional Math Games

1. Candy Land
2. Chutes and Ladders
3. Uno
4. War
5. Memory

The games are great way to review or introduce colors.

Station 5: Sealaska Heritage Website - Numbers Interactive Game

http://www.sealaskaheritage.org/programs/language_resources.htm

Assessment: (on going during class)

Challenge the students to only speak in Tlingit while playing the games.

Additional Optional Activities:

- ◆ Sing the Counting Songs.
- ◆ Use the classroom teachers math games.
- ◆ *Woosh Yáx Yaa Datóowch Tlingit Math Book* by the students of Hoonah High School & Katherine Mills

Individual Math Assessment Sheet. Student's Name:

Goldbelt Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"



Math-Wooch Yáx Yaa Datóowch K-1

"Drink from the vessel of Traditional Knowledge."

Counting 0 - 20 check box if student correctly counted to the number.

0		7		14	
1		8		15	
2		9		16	
3		10		17	
4		11		18	
5		12		19	
6		13		20	

Did student count higher?

Write the highest number counted to correctly here:

Adding Two Numbers together - do this assessment twice

Instruct the Student to Roll Two Dice in Tlingit.	1 st Time		2 nd Time	
Write the two numbers here:				
Did the student correctly identify both numbers?				
Instruct the student to add the numbers in Tlingit.				
Did the student correctly add the numbers together?				

Have the student count backwards 10 - 0, check the box if the student correctly counts to the number

10		7		4		1	
9		6		3		0	
8		5		2			

Instruct the student to count by 2s 0 - 20 in Tlingit,

0		6		12		18	
2		8		14		20	
4		10		16			

Using flash cards pick four numbers and ask student to identify the number.

Number:	Said Wrong #	Said Correct # by counting to it	Said Correct #



Math-Wooch Yáx Yaa Datóowch

K-1

"Drink from the vessel of Traditional Knowledge."

--	--	--	--

Math Counting/Adding Assessment

Students Names																			
count 0-10																			
count 10-20																			
How far they can count to																			
count by 2s to 20																			
count backwards from 10 to 0																			
Add two numbers correctly																			
Identify 4 random numbers with out counting to them																			

Total kids assessed:



Math-Wooch Yáx Yaa Datóowch

K-1

"Drink from the vessel of Traditional Knowledge."

SOUTHEAST TRADITIONAL TRIBAL VALUES

"OUR WAY OF LIFE"

- Discipline and Obedience to the Traditions of our Ancestors
- Respect for Self, Elders and Others
- Respect for Nature and Property
- Patience
- Pride in Family, Clan and Traditions is found in Love, Loyalty and Generosity
- Be Strong in Mind, Body and Spirit
- Humor
- Hold Each Other Up
- Listen Well and with Respect
- Speak with Care
- We are Stewards of the Air, Land and Sea
- Reverence for Our Creator
- Live in Peace and Harmony
- Be Strong and Have Courage

Developed, Adapted, and Approved at the 2004 Elders Forum on Traditional Values

Sponsored by Central Council Tlingit and Haida Indian Tribes of Alaska, Circles of Care, SAMHSA Substance Abuse Planning Project, Elderly Nutrition Program, Johnson O'Malley Program and Alaska Rural Systemic Initiative, Alaska Association of School Boards

Corbett Heritage Foundation/2011

Award # 90NL0460/02 from Administration for Native Americans

"Tlingit Flowing Through Generations: A Region- Wide Approach to Language Revitalization"