

Title: Lethkaiha Yawabi: Counting in Stoney

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Marissa: I am a recent Werklund Graduate with an Undergraduate in Kinesiology majoring in Pedagogy. I have a passion for movement education as well as international teaching and learning experiences. I have taught Physical Education and Health in Antigua West Indies, as well as taught and observed education in Japan. I believe that a classroom is a diverse group of individuals with different experiences, abilities, skills and backgrounds and addressing the needs of every student is my goal in education.

Laura: I am a 2020 Werklund School of Education graduate with an Undergraduate and Graduate degree in Geoscience. I am passionate about providing students with hands-on, memorable learning experiences where they understand why they are learning what they are being taught. I believe in incorporating student voice every step of the way and strive to support the learning needs as well as the personal needs of every student in my classroom.

Resources used and possible concerns	<p>Resource:</p> <ul style="list-style-type: none"> - Picture Book, <i>Lethkaiha Yawabi: Counting in Stoney</i> <p>Possible Concerns</p> <ul style="list-style-type: none"> - Pronunciation of Îethka words. Go over correct pronunciation before reading out aloud.
Author/creator and/or literature background	<p>Natasha Wesley(Îyarhe Wiyapta) (Shining Mountains)</p> <ul style="list-style-type: none"> - Seventh-generation descendant of the Holy Medicine Man Chief Hector Crawler, and a sixth-generation descendant of George Crawler, who was a Treaty 7 signatory. - She is also a fifth-generation descendant of Ta Otha (Moose Killer), Chief Peter Wesley, and Holy Medicine Man Chief William Snow <p>Tanisha Wesley</p> <ul style="list-style-type: none"> - Sister to Natasha - From the Stoney Nakoda First Nation - Artist
UPE course connections (not exhaustive)	<p>EDUC 460 and 535: Specialization I & II</p> <ul style="list-style-type: none"> - This lesson can be linked to the Mathematics specialization courses, specifically for the early childhood education route. This lesson utilizes the concept of number sense pictorially and in numerical form and allows students to explore the use of a

	<p>number line with their own number examples.</p> <p>EDUC 430: Pragmatics of Learning and Teaching</p> <ul style="list-style-type: none"> - This lesson provides an example of using an Indigenous resource in the classroom. By using this picture book to teach students the Stoney Nakoda words for counting, this lesson weaves Indigenous ways of knowing into mathematics in a more substantial way than simply using Indigenous objects as examples and also teaches about the community students live in. This connects to meeting TQS requirements as it considers incorporating Indigenous ways of knowing into the curriculum which pre-service teachers will be expected to do. <p>EDUC 450: Diversity in Learning</p> <ul style="list-style-type: none"> - This lesson supports the diversity course as it provides an example of how different perspectives can be introduced to a curricular outcome. By using this book, this lesson demonstrates how Indigenous ways of knowing can be incorporated into the Alberta curriculum. This lesson also allows pre-service teachers to see that picture books can be used at any grade level as an entry into the curricular subject matter through diverse perspectives.
K-12 connection	<ul style="list-style-type: none"> - Target age range: Kindergarten. This book easily suits younger audiences and is perfect for connections to mathematics, specifically number sense. <ul style="list-style-type: none"> - Mathematics - General Outcome: Develop number sense <ul style="list-style-type: none"> - Specific Outcomes: <ul style="list-style-type: none"> - Say the number sequence 1 to 10 by 1s, starting anywhere from 1 to 10 and from 10 to 1 - Subitize (recognize at a glance) and name familiar arrangements of 1 to 5 objects or dots - Relate a numeral, 1 to 10, to its respective quantity - Represent and describe numbers 2 to 10, concretely and pictorially - Compare quantities 1 to 10, using one-to-one correspondence
Materials	<ul style="list-style-type: none"> - Picture Book, <i>Iethkaiha Yawabi: Counting in Stoney</i>

	<ul style="list-style-type: none"> - Pencil, crayons - Number Names, printed ahead of time (one number per blank page OR half page) (Appendix A) - Chart paper or board, markers
<p>Rationale</p>	<p>Big idea: Connecting to the Indigenous roots of our community and translating that into mathematics concepts.</p> <p>Purpose: The purpose of this lesson is to gain an understanding of number sequence 1-10, use of the number line and relating numerals to their respective quantities, while acknowledging the Indigenous land on which we live and that our community has many cultures and languages residing within it.</p>
<p>Lesson/activities</p>	<ol style="list-style-type: none"> 1. Tell the students that we are going to read a counting story that was written by a Stoney Nakoda author who lives in Treaty 7 territory, which is also where we live, if the students are in Calgary. 2. Read the book, <i>Iethkaiha Yawabi: Counting in Stoney</i> 3. Go through the pictures in the book again and ask the students to look at the pictures and determine how many items are there, for example: three raspberries, four blue birds, etc. 4. Tell the students that this writer picked her picture examples because they are all important to her and her culture and community. Indigenous communities connect to the natural world and that is why a lot of the examples are plants or animals. 5. Brainstorm a list some natural examples of things that we can count in the world around us that could be used, list could include: mountain, tree, river, raspberry, blueberry, blackberry, bird, fish, bear, deer, moose, rock, strawberry, flower, bison, horse, stars, moon, sun, etc. 6. Explain that a number line is a math tool that helps to count, add and subtract numbers. Numbers on the line get BIGGER when you go to the left and SMALLER when you go to the right. Show an example of a number line on chart paper or the board, with numbers one to ten 7. Tell the students that we are going to create our own examples for the Îethka words and make a number line from one to ten with them. We are going to also use natural things, (plants and animals) for our examples to

	<p>connect with the Alberta Treaty land that we live on.</p> <p>**At this point in the lesson, adapt the discussion to suit the treaty land that your school is located on. Alberta is home to Treaties 6, 7 and 8 and this resource from the Government of Canada can help to support this discussion and the celebration of the land we are living on:</p> <p>https://www.aadnc-aandc.gc.ca/eng/1100100020670/1100100020675</p> <ol style="list-style-type: none">8. Hand out the printed Îlethka words on blank paper to the students as writing the words in kindergarten may be difficult9. Start with the word for one and ask the students to draw one thing to pictorially represent one. Continue through all the way up to ten.10. Once students have completed their numbers, they can practice putting them in the correct order, and can be used throughout the year. A class set can also be recreated from the examples in the book and displayed in the classroom as a sample number line for a bulletin board.

Supporting Sources (APA):

Alberta Education. (2016). *Mathematics Kindergarten to Grade 9: Program of Studies*.

Retrieved from

https://education.alberta.ca/media/3115252/2016_k_to_9_math_pos.pdf

Government of Canada. (2010). *First Nations in Alberta*. Retrieved from

<https://www.aadnc-aandc.gc.ca/eng/1100100020670/1100100020675>

Appendix A

Wazi

One

1

Nûm

Two

2

Yamni

Three

3

Ktûtha

Four

4

Thapta

Five

5

Sakpe

Six

6

Sagowî

Seven

7

Sarhnora

Eight

8

Nâpchûwîk

Nine

9

Wîkchemnâ

Ten

10