



Grade Level: K
Subject: Math

How Many Bones?

ESSENTIAL UNDERSTANDINGS

- Time Immemorial
- Lifeways

LEARNING OUTCOMES

- Students will be able to demonstrate ability to count between 1-20.
- Students will be able to determine the number of bones in different fish regardless of how the bones are arranged.

CULTURALLY RESPONSIVE PRACTICES

- Preserving and honoring cultural history
- Student talk, working together and individually

ASSESSMENT

Students will be assessed on their participation during whole class learning and on the proficient completion of their exit ticket.

Overview

Students will explore a traditional Grand Ronde story and apply the knowledge of counting between 1-20 (regardless on configuration) to elements from the story.

MATERIALS

- The Salmon and the Eel [text](#) or [read aloud](#)
- [“How Many Bones?” Worksheet](#)
- [“How Many Bones?” Exit Ticket](#)
- Manipulatives (optional)

LOGISTICS

- Where does this activity take place?
Classroom
- How are the students organized?

Whole Class Teams: 3-5

Pairs **Individually**

TIME REQUIRED

30-50 minutes

STANDARDS

Oregon Common Core Standards: Math

CCSS.MATH.CONTENT.K.CC.B.4.B Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

CCSS.MATH.CONTENT.K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

Background for Teachers

Prior to teaching this lesson, it is important that teachers have a general understanding of the Native American tribes in Oregon and more specifically, the history of the Confederated Tribes of Grand Ronde. It would also be beneficial to review the book, The Salmon and the Eel.

The Salmon and the Eel story is a traditional Grand Ronde story. Salmon and Eel are seen playing a gambling game in the story. This game is called stick game. In Native communities, stick game is usually played during social events and with animal bones. One bone has markings on it, which means it is a male bone. The other bone has no markings on it and it is a female bone. The goal of the game is to be able to guess which hand the person is hiding the female bone in. If you guess correctly, you win that round. If you guess incorrectly, you have to give a stick to your opponent. The game can go on for a very long time. Once a person has won all of the other person's sticks they then win the whole game.

VOCABULARY

- **traditional story** - a story that has been told and retold over many years.
- **gambling** - to play a game in which something can be won or lost
- **dentalium** - tooth shells used as currency



Opening

Hold up the book for the students and ask them what they notice about the cover. Ask students if they recognize anything.

Tell students that this book is a traditional Grand Ronde story that the people of the Grand Ronde Tribe have told for many years

Activity

1. Read the book: *The Salmon and the Eel* to the students.
 - a. While reading the story, have students practice counting between 1-10. For example, you could count the number of gills on the eel, the number of fish on each page, the number of items the salmon has won.
2. When finished reading the book, let students know that they will be practicing their counting by counting the number of bones fish from the story have.
3. Pass out "How Many Bones" Worksheet to the students.
4. Ask for volunteers to lead the counting of the bones in fish diagram 1 and 2. Write the answer in the space provided.
5. If students are ready, release them to work with a table partner on the remaining fish diagrams.
6. Allow time for students to work through the problems.
7. Gather students back as a whole group. Ask for experts to show the class their thinking for fish diagrams 3, 4 and 5.
8. Allow students to talk through their thinking if differences arise. For example if Student A got 5 bones for fish diagram 4 and Student B thinks the answer is 10.

Closure

Pass out the exit tickets to students and allow them to complete the exit ticket on their own. If there is time, after having students turn in their exit ticket, review it with them and complete it as a class using responses from students.

Differentiation

- **Using Manipulatives:** Allow students to use manipulative to practice counting to 20 to support their learning.
- **Create Your Own:** Students can practice counting by making their own fish and eel images for them and their peers to practice their counting.

Extension

- Offer a manipulative to students to use during the lesson to assist them with their counting.
- Assign small groups during the lesson based on skill.
- Read through the exit ticket with students prior to starting the lesson to ensure they understand the task. If needed, review it again with students one on one so they can ask questions.
- Do frequent check-ins with students that may need additional support and offer breaks when students need them to refocus on their tasks.

Notes/Other

Jan Michael Looking Wolf's or Grand Ronde Canoe Family audio tracks can be played as background music while students are working. These audio tracks can be found on Spotify or Apple Music.

Jan Michael Looking Wolf: [Spotify](#) and [Apple Music](#)
Grand Ronde Canoe Family: [Spotify](#) and [Apple Music](#)

Appendix

The Salmon and the Eel text: This text is available via PDF at the link below or by request from the Confederated Tribes of Grand Ronde. To request a copy of the book for your classroom, please use this form here: <https://forms.gle/kQuassnXpuFwkUE7A>

- PDF: <https://drive.google.com/file/d/1MvPkzWtUP7YO2v6E9b3lcR-MUll-S9cY/view?usp=sharing>

The Salmon and the Eel read aloud:

- English: <https://youtu.be/3n1z8JcrlFY>
- Chinuk Wawa: <https://www.youtube.com/watch?v=9TGbt3RN-sq>

"How Many Bones?" Worksheet:

<https://drive.google.com/file/d/1mOxfCXrtb95kKz1-XkLyuX0vwmAUk5Ym/view?usp=sharing>

"How Many Bones?" Exit Ticket:

<https://drive.google.com/file/d/1uQVZMLntbCbqSeKSJul2jXokVWObQvCx/view?usp=sharing>