



MATHEMATICS

Counting Nature's Gifts – Fishing, Hunting, and Gathering

ESSENTIAL UNDERSTANDING

• Treaties with the United States

LEARNING OUTCOMES

Students will understand

- a treaty is an agreement between two nations,
- Oregon Tribes have a right to gather, hunt and fish on their land today,
- how to count gathered food, and
- how to determine more, less, and equal amounts.

ESSENTIAL QUESTIONS

- What is a treaty and why is it important to Tribes?
- How can we use counting to help gather food?

REQUIRED TIME

• 35 minutes

Overview

In this lesson, students will participate in an activity about gathering food from nature—like Native American Tribes in Oregon have always done. Students will count what they find, then sort and compare the amounts of "food" they have gathered with their friends. Students will learn that a treaty is an agreement between Nations that Tribes use today to keep gathering, hunting, and fishing on their ancestral lands.

Background for Teachers

For thousands of years, Native American Tribes in Oregon have gathered food from nature, including fishing for salmon, hunting deer and elk, and picking berries. These resources were important for survival and continue to be meaningful traditions. Treaties between Native American Tribes and the United States attempted to limit these lifeways and were used as a tool for systemic genocide. Over time, Tribes have been able to use treaties instead to exercise their sovereign right to

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gather plants, fish, and hunt animals in their traditional homelands. Even though treaties changed how and where Native people in Oregon could live, many Tribes today continue to fish, hunt, and gather food for their families and communities.

Considerations for Teachers

Practices

While teaching this lesson, the following principles can help guide your decision-making and engagement with students.

- Focus on teaching the Essential Understanding, Treaties with the United States, through an analysis of today's math lesson on numbers and counting.
- When sharing content with students, address the "why" not just the "what".
- Highlight the strengths and struggles of Oregon's Indigenous peoples today while also acknowledging their history and tradition.
- Use visuals and hands-on materials to make the lesson engaging.
- Ensure your teaching practices are accessible and appropriate for Native and non-Native students.

STANDARDS

Oregon mathematics standards

- K.CC.4: Understand the relationship between numbers and quantities; connect counting to cardinality.
- K.CC.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.
- K.CC.6: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies (include groups with up to ten objects).
- Encourage discussion and movement to help students connect with the topic.
- Use real-world examples of Native American communities today.

Assessment

During this lesson, observe and listen to students during discussions and as they work independently and collaboratively to count and compare items. Use this information to

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determine how their learning is progressing. Write down what you notice about what students say and do in relation to the success criteria. Use this formative information to provide feedback to students and plan next steps.

At the end of the lesson, provide students with an opportunity to reflect on their learning through a self-assessment. Students can indicate their level of learning in relation to specific success criteria. They can also write out an explanation of why they feel they are at that learning stage.

Success Criteria

- I can describe rights recognized by treaties in Oregon.
- I can count how many pieces of food I have gathered.
- I can compare amounts of food with a friend to see who has more or less.

Lesson Activities

Before the lesson, set up the space and materials for the student activity.

- **1.** Place pictures or small objects around the room to represent food:
- Blue paper figure (or circles) to represent fish
- Brown paper figure (or squares) to represent animals for hunting
- Red or purple paper figures (or triangle) to represent berries

KEY WORDS and IDEAS

- **Treaty** An agreement between countries
- **Gathering** To collect plants from nature for food
- Hunting To catch animals in nature for food
- Fishing To catch fish in waterways for food
- Counting Saying numbers in order for each object
- More Having a bigger amount of something
- Less Having a smaller amount of something

MATERIALS

What materials are needed for students to engage in this activity?

- Paper cutouts or objects to represent fish, berries, and animals
- Pictures of Oregon Tribes hunting and gathering tools
- Baskets or small containers for gathering
- A large chart or number cards for comparing totals
- Tape or cones to mark stations on the floor
- Student self-assessment

2. Mark and designate three areas on the floor as fishing, hunting, and gathering stations.

Opening

Time: 10 minutes

Step 1:

Say: "A long time ago—and still today—Tribes in Oregon gather food from nature, like berries, fish, and animals. They gather to take care of their families and communities."

Ask students: "Where do we get our food?" (Students may say stores, farms, gardens, etc.)

Step 2:

Introduce students to the key words: gathering, fishing, hunting, and treaties.

Review the learning outcomes, success criteria and essential questions with students.

Step 3:

Communicate the following ideas to students in your own words or read the following text aloud to them.

A long time ago, there were no grocery stores. Oregon Tribes gathered food by fishing, hunting, and picking berries from the land for thousands of years.

When people came to Oregon from other countries hundreds of years ago, they also wanted to get food from the land. Tribes were forced to make agreements called treaties with these people about where each of them could get food. Tribes lost a lot of the land they called home in these treaties.

Oregon Tribes also use these same treaties to protect their right to gather food. Many Tribes still fish, hunt, and gather today in addition to other modern ways to get food. Gathering food from the land connects people to their traditions and ancestors.

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Step 4:

Show images to students of first foods, hunting and gathering and related tools.

Examples of hunting and gathering tools from the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw (CTCLUSI) can be found at the end of this lesson.

Explain to students that next they are going to count and compare the amount of food they hunt, fish, and gather from the land.

Main Activity

Time: 15 minutes

Step 1:

Engage students in the gathering food activity.

First, divide students into three small groups.

Give each group a different number set, e.g., 3, 2, 4, and 1 to represent the number of animals, berries, and fish they will pick up based on those numbers. Give each student group a container to "gather" the food.

Students walk to the different stations and pick up a set number of food types (animal, berry, fish).

Once they gather their food, they return to a central area (or their seats).

Step 2:

Engage students in counting & comparing food.

Ask each student group to tell the whole group how many of each food item they gathered. Record student answers on chart paper or a whiteboard to visually show the different amounts.

Ask students:

- "Who has the most/fewer fish?"
- "Who has the most/fewer berries?"
- "Do any two groups have the same amount?"

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Closing

Time: 10 minutes

Step 1:

Engage students in discussion & reflection. Ask students:

"What is one right recognized by treaties in Oregon?"

"Why do you think it is important for Oregon Tribes to keep fishing, hunting, and gathering?"

"How do you think counting helps Tribes as they gather food?"

Reinforce the ideas to students that today hunting, gathering and fishing connect Native peoples in Oregon to their ancestral lands and traditions. These practices are also rights recognized by Treaties.

Additional Resources

Related lesson

3rd grade lesson, Lampreys by the Cow Creek Band of the Umpqua Tribe of Indians

- Lesson Plans: Lampreys
- PowerPoint: Lampreys
- Reporting form
- Worksheet 1 and Worksheet 2
- Exit Ticket
- <u>Fishing Regulations</u>

Related books

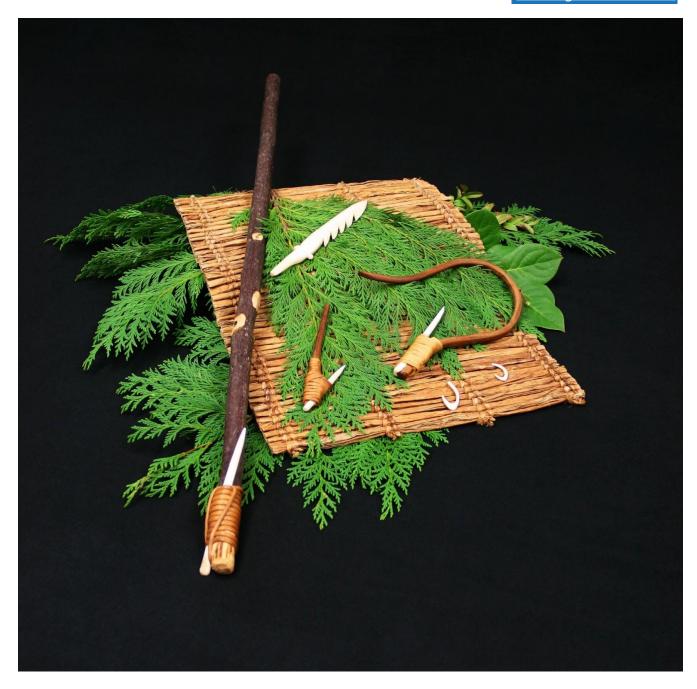
We Are Water Protectors by Carole Lindstrom (connects to protecting natural resources).

The Berry Song by Michaela Goode

Images from The Confederated Tribes of Coos, Lower Umpqua, and Siuslaw

Traditional fishing tools and hooks





Images from CTCLUSI, photographer Morgan Gaines.

Cedar bailer and roses with myrtle nuts on beaded collar



Leister spear



Image from CTCLUSI, photographer Morgan Gaines.

Student Self-Assessment

Name:

Directions for teachers: Read aloud the lesson Success Criteria in the first column to students. Have them indicate if they were able to meet the criteria by marking it in the handout, with hand gestures, or by sharing aloud. Ask students to explain why they chose "not yet" or "yes" to a peer.

Success Criteria	Not Yet	Yes
I can describe rights recognized by treaties in Oregon.		
I can count how many pieces of food I have gathered.		
I can compare amounts of food with a friend to see who has more or less.		