



Montana
Office of Public Instruction
Denise Juneau, State Superintendent

opi.mt.gov

Mathematics Model Teaching Unit

Counting 1:1 Correspondence

Created by Jennifer La Fromboise-Wagner(Blackfeet)

Grade K - Duration: 30 minutes

Stage 1 Desired Results

Established Goals:

Number Sense and Operation Mathematics Content Standard 1: A student, applying reasoning and problem solving, will use number sense and operations to represent numbers in multiple ways, understand relationships among numbers and number systems, make reasonable estimates, and compute fluently within a variety of relevant cultural contexts, including those of Montana American Indians.

IEFA Essential Understanding 1: There is great diversity among the 12 tribal Nations of Montana in their languages, cultures, histories and governments. Each Nation has a distinct and unique cultural heritage that contributes to modern Montana.

Understandings:

- Build the foundation for number sense using 1 to 1 correspondence.
- Learn information relating to the Blackfeet tribe.

Essential Questions:

- How did you know there was ____?
- How did you know what Blackfeet manipulative you counted?
- Why do you have to touch each manipulative?
- Why do you have to practice counting manipulatives?

Students will be able to...

- Count objects 1-10 using 1 to 1 correspondence.
- Recall the Blackfeet manipulatives that were used.

Students will know...

- What manipulative they have counted by announcing it at the end (ex. "6 Blackfeet Flags").
- To count each manipulative once and in a way/order as to not recount them.
- They have counted a number set by pointing 1 to 1 and saying each number word for each manipulative.
- By practicing the 1 to 1 correspondence it will help with number sense.
- Some knowledge about the Blackfeet Indians.

Stage 2 Assessment Evidence

Performance Tasks:

- Classroom written work in the form of a drawing or words, if applicable.
What is your favorite number?
What is your favorite Blackfeet manipulative?

Other Evidence

- Classroom observations during the lesson, free choice time, or other classroom routines where counting appears.
- Classroom conversations with a student or whole group discussions.
- Asking questions for self-evaluation: Do you like to count? Do you think you are a good counter? Why/Why not?

Stage 3 Learning Plan

Learning Activities:

Introduce the lesson:

“We are going to learn our numbers from 1-10 by counting manipulatives using 1 to 1 correspondence. To do this we will be using manipulatives that have pictures and information relating to the Blackfeet Tribe that is one of the 12 tribes of Montana. Each day we will learn our numbers, a new manipulative and how it relates to the Blackfeet Indians. It is important to remember the information or the name of the manipulative because you will be asked questions throughout the lesson. Also remember we are learning numbers and counting as well. So by the end we will be able to count using 1 to 1 correspondence.”

Follow these steps for each day you introduce a number:

- 1) Show a copy of the manipulative you are going to count for that day. Using the definition sheet, tell about the manipulative. Have students repeat the name of the manipulative. Ask for 1 or 2 thoughts about the manipulative
- 2) On the second day review the previous manipulatives. Ask “What have you learned about the Blackfeet Indians?” Record it on chart paper and save for the remaining days to review and reflect.
- 3) Practice counting to the next number being taught that day.
- 4) Introduce the number for the day. Discuss what they know about that number and record it on a different chart paper. Save for the remaining days to review and reflect. Have children go look for and count objects in the room relating to that number. Give them a few minutes to find something to count. Call back to group to discuss what they found/counted. Add these to the chart paper for the number of the day.
- 5) Model 1:1 counting with the number and manipulatives for the day. Model ways to organize their counting, touching the manipulatives, arranging them in lines or piles, or by counting left to right and top to bottom. Tell them that organizing what they count helps so they don't count the manipulatives twice.

Mathematics Kindergarten – Counting 1:1 Correspondence (continued)

- 6) Hand out the amount of manipulatives for the day and have students practice counting at the table or desk. After they count, have them say out loud the number counted and the name of the manipulative, ex. 5 Blackfeet lodges, etc. Have them count to a neighbor while you are going around observing and helping.
- 7) Pick up the manipulatives.
- 8) Come together as a group to recall the number and manipulatives for the day. Ask one of the essential questions: How did you know there was ____? How did you know what Blackfeet manipulative you counted? Why do you have to touch each manipulative? Why do you have to practice counting manipulatives? Check for understanding or any confusion.
- 9) On the last day, have a class discussion regarding all the Blackfeet manipulatives they have learned. Then do the Performance tasks listed in the assessment section.

*Information: Provide practice time for counting with other manipulatives or objects as the day goes on. Look for opportunities to develop number sense by asking questions like: How many drumsticks would you need for 6 drums? Do we have enough Blackfeet Flags for every person? Etc.

Resources:

Web sites:

- www.opi.mt.gov/IndianEd/
- www.nctm.org
- www.bps.k12.mt.us
- www.glenbow.org/blackfoot/
- www.glenbow.org/exhibitions/online/blackfoot/

Books:

Ewers, John Canfield. (1967) *The Blackfeet: Raiders on the Northwestern Plains*. University of Oklahoma Press

Materials/Resources Needed:

- Definitions of Blackfeet manipulative material: see attached.
- Blackfeet manipulative material: see attached
- Make enough copies (cardstock paper) for class to count numbers 1-10.
- Cut out manipulatives then laminate.
- Put in baggies or containers for organization.
- Chart paper to record class responses.

Blackfeet Manipulative
Definitions

Painted Lodge- The designs relate to the stars (top), visions (middle), and the earth (bottom). The ear flaps have the Big Dipper on one side, the Pleiades on the other side and a butterfly (cross) on the back. The bottom has mountains or hills and stars. The middle is only for those who have had visions for a painted lodge. Not every Blackfeet has a painted lodge. They are often called painted teepees.

Lodge poles- The lodge poles are the structural support for the lodge coverings. A regular lodge uses about 22 poles per lodge. A Blackfeet lodge uses 4 main poles for the foundation, unlike other tribes which use three. They are often called teepee poles.

Pegs- The pegs anchor the lodge to the ground. They can be made of birch. They are shorter than buttons and thicker. The end is sharpened and peeled. The top can be peeled to show stripes for decoration or identification.

Buttons- The buttons hold the lodge together in the front, above and below the door. They can be made of willow. They are peeled on the bottom and can have stripes on the top for decoration or identification.

Parfleche- A rectangular suitcase made from animal skins (rawhide) and decorated with geometric designs. They have a strap at the top for hanging.

Blackfeet Reservation shape- This is the current shape of the Blackfeet Reservation. This is a result of treaties made from 1851 to 1896. The reservation is located in Montana next to Glacier National Park.

Chief Mountain shape- A mountain in the Rocky Mountains, which is a ceremonial and spiritual place for the Blackfeet people and used by the Blackfeet people.

Eagle feather- Eagle feathers are used to adorn many ceremonial objects. It is illegal for anyone to sell eagle feathers.

Hand drum- A small handheld drum made of animal skin stretched over a round wood frame. It is used by members of the tribe to sing honor songs for individuals who have accomplished great deeds. Blackfeet also use songs for courting, traveling, good luck, lullabies, and praise.

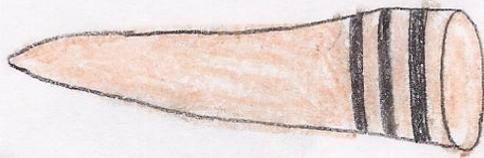
Drumstick- A drum stick is a stick with buckskin at the top to use with a hand drum to sing honor songs. Songs are a significant part of the Blackfeet culture and life.



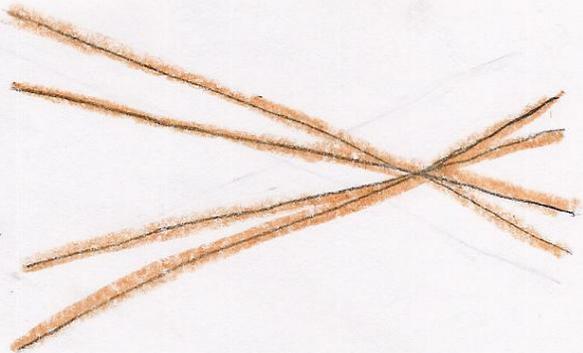
eagle feather



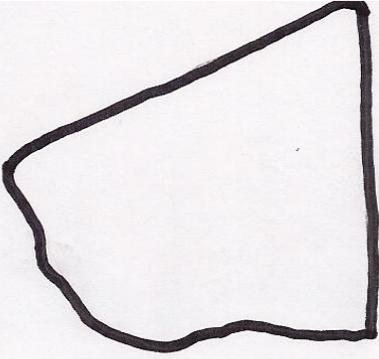
button



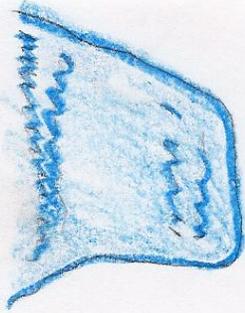
peg



lodge poles



Blackfoot Reservation



Chief Mountain

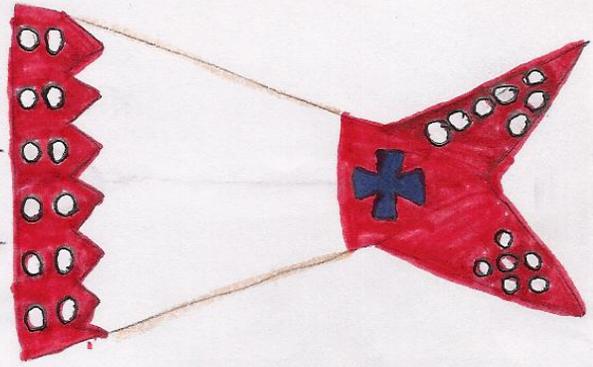


hand drum



drum stick

Painted lodge
(rear)



parfleche

