

# Problem Solving Practice Sheets featuring Tribal Entities

by Doug Ruhman

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**Grade level** 4

**Time required**

One 45 minute class period

**Materials/Technology**

Practice worksheets

## Summary

In this lesson, students practice solving story problems using problems developed around actual tribal employees in the context of doing their work. Various math concepts blocks are addressed.

## Objectives

The student will:

- 1) gain practice in problem solving strategies while applying previously taught operational concepts.
- 2) learn about real tribal employees and the offices in which they work.
- 3) build an awareness of the work that various tribal entities perform in the community.

## Montana Math standard addressed

Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.

## Assessment

Evaluate students based on their proficiency in accurately completing the practice worksheets.

## Background

This activity assumes that some previous teaching has occurred relevant to the mathematical operations expressed. This activity is assuredly more of a practice opportunity than it is a “lesson”. However, I have sought to use tribal references for the situations and characters, with the goal of serving both tribal and nontribal students in a reservation school in the following ways: for tribally-connected students, the goal is to lend cultural relevance and meaning to the mathematical situation, and show the math’s connection to their own peoples’ lives. Seeing relatives or friends represented in mathematical situations may enhance the meaningfulness of the practice. For nontribal students, the goal is similar, but also to expose these students to some of the workings of tribal entities such as Tribal Housing, Fish and Wildlife, Forestry, Government, and Cultural Resources.

## Procedure

- 1) Review the math skill presented on the practice sheet with students on the chalk/marker board. Tell them that they will be practicing the skill today while learning about some people

- and jobs having to do with the local tribes.
- 2) Distribute copies of the practice sheets to students. Have them read the information in the box at the top of the sheet, and discuss the information with students. Ask if anyone knows the individuals mentioned in the passages; if so, allow time for them to share their knowledge with the class. This is an important step, as it may be validating for students to show and build a personal connection to the task.
  - 3) Allow students to begin. Be sure to allow sufficient time for students to complete the page and check their work. Suggested completion times for most 4<sup>th</sup> graders are provided on the answer keys that follow each sheet master in this guide.
  - 4) Correct with students in class. Before collecting for grading purposes, have students share what they learned about the tribal persons/agencies with the class.

### **Extensions**

- 1) Record the closing comments regarding what was learned about the tribal persons on butcher paper. Keep and display these around the classroom as posters for later referral and reinforcement.
- 2) Have students research other tribal individuals and their job-math connections, and develop their own practice pages for problem solving, in the same manner as the ones presented. These could be for their own use (for classmates), or for younger students in earlier grades.
- 3) Students could choose one of the people/scenarios presented on the sheets and do a more in-depth report on the job/individual, and present this to the class as a follow up to doing the practice sheets. This might involve meeting the individual and conducting an interview. Students could work on this independently or in groups of 3 or 4.

### **Further information**

For further information about this activity, contact the author at:

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RSI Curriculum Trunk  
Problem Solving Activities Featuring Tribal Entities  
Subjects: Math, and social studies

To bring authenticity to the tribal members mentioned in the problem solving activities outlined in the this lesson, a video of live interviews featuring each tribal member is enclosed for student viewing. Each tribal member was asked to introduce who they were, and to describe and outline their job titles and responsibilities. They were asked how their particular job contributed to their tribal community. They were also asked what piece of wisdom they would like to impart to the students that would be viewing their interviews. The objective of these interviews was to help young people identify with active tribal members and open their eyes to possible educational and career possibilities.

**Field trip possibilities:**

1. Fish and Wildlife Warehouse located at the old Montana Power building behind the old score board at Linderman Elementary School.

Contact: Germaine White at the People's Center in Pablo

What's there? The tribal rescue boat, animal traps including a bear trap, and much more. 2. Tom McDonald also volunteered to take students to the new Fish and Wildlife facilities on Main Street in Polson

3. Salish Kootenai College art building

Contact: Corky Clairmont

Possibilities: To view what the artists have on the site. May be possible to have students take a field trip to this center and have a pre-arranged art lesson with Corky.

4. Lester Bigcrane- who works for the recreational, environmental, and preservation department, is currently putting together a slide show presentation for educational purposes. He is looking for teachers who want to pilot this program in their classroom.