

Improvisation

Skills: *Problem Solving*
Cooperative Learning

Four numbers should be written on the chalkboard. Then, the class can be divided into cooperative groups. Each group should incorporate the four numbers written on the chalkboard in a word problem it writes. After this has been accomplished, a student representing each group will be given the opportunity to read aloud and to pose his or her group's problem to the rest of the class.

Below are two examples of word problems written by two groups involving the following numbers: 18 13 17 23

The members of group A wrote the problem below using the four numbers.



On Monday, June 5, the construction site had 18 workers. On Tuesday, 13 more workers joined those already present. By Wednesday, the call went out for 17 more craftsmen. Within three weeks, 23 of the workers left the job site and were assigned to other work locations. How many of the skilled craftsmen remained at the original construction site?

_____ workers were still at the original construction site.

The members of group B created the word problem below using the same four numbers.

A bank teller working for the First National Bank noted that there were 18 cartons in the large vault. The teller also noted that each carton contained 13 boxes. It seemed, after careful examination, that each box contained 17 wrapped piles of bills. This same teller discovered that there were 23 \$20 bills in each pile. In all, how much money did the bank teller discover?

The bank teller discovered _____.



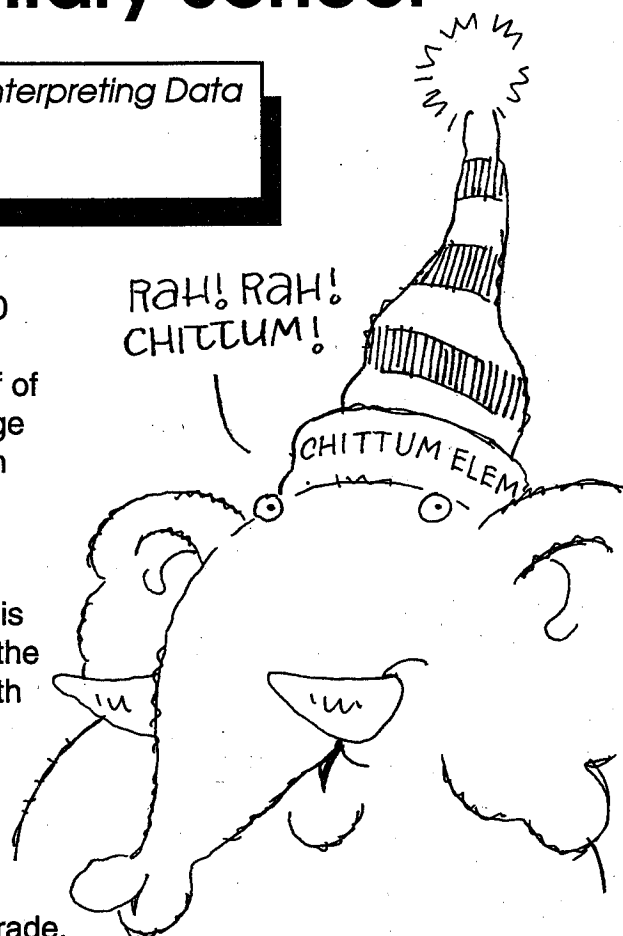
After the instructions and examples have been presented to students, they can try their own using the four numbers written on the board.

Chittum Elementary School

Skills: *Gathering and Interpreting Data*
Problem Solving
Percentage

Attending the Chittum Elementary School are 580 bright, intelligent, well-mannered, kind, and considerate youngsters. Combine this with a staff of professionals who excite, motivate, and encourage these students. These are the main ingredients in learning.

Below and on pages 38-39 is some additional information about the 580 students who attend this great elementary school! In groups of three, find the answers to the percentage problems that deal with student population and student hobbies.



Student population by grades:

- 18 percent of the student body is in the fifth grade.
- 22 percent of the school population is in grade four.
- The number of third-graders is one and a half times the number of fifth-graders.
- Of the remaining students, 55 percent are in grade two,
- and 45 percent are in the first grade.

_____ students

_____ students

_____ students

_____ students

_____ students

Chittum Elementary School continued

Hobbies at Chittum:

A survey was taken of the 580 students and, with regard to hobbies, this is what was uncovered:

- 11 percent of the student population considered reading to be their main hobby.
_____ students
- 24.5 percent said that sports was their hobby.
_____ students
- 41 percent of the student body said that their main hobby was spending time with their friends.
_____ students
- 19 percent said that they enjoyed watching television.
_____ students
- The remaining students said that they had no hobbies at all.
_____ students

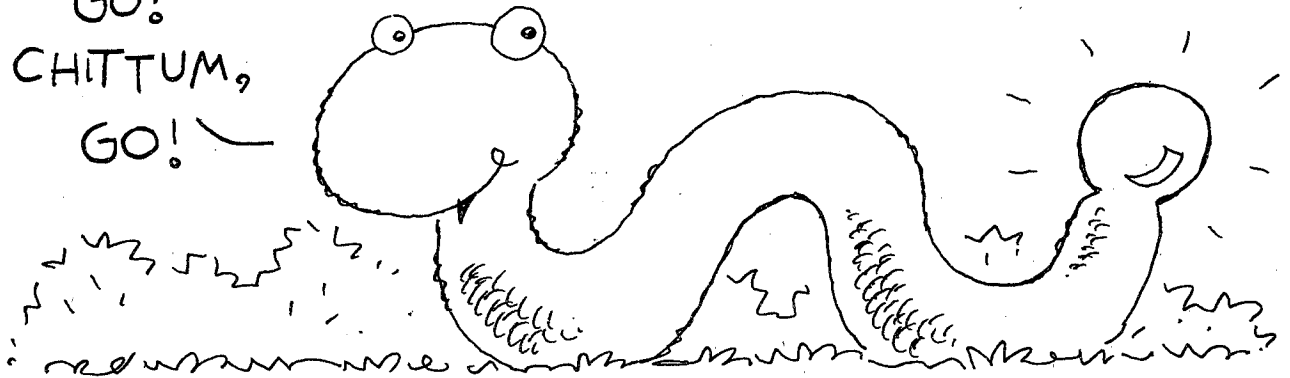
How do you rate Chittum?

This question was presented to the fifth-graders. The students had a choice of five responses—awesome, super, great, good, ok.

- 81 percent of the fifth-graders responded with "awesome!"
_____ fifth-grade students
- 9 percent of the fifth-grade class answered with "super."
_____ fifth-grade students
- The remainder of the class responded with "great," "good," or "ok."
_____ fifth-grade students

Chittum Elementary School continued

GO!
CHITTUM,
GO!



The following question was posed to the fourth- and fifth-graders:

"When becoming an adult, the profession you would probably choose is what?"

- 15 percent of the students polled responded with "teacher."

_____ chose teacher.

- 19 percent of the students responded with "pro sports."

_____ chose pro sports.

- 8 percent of the students responded with "medicine."

_____ chose medicine.

- 11 percent of the students responded with "entertainment."

_____ chose entertainment.

- The remainder of the students were uncertain of what they wanted to be when they become adults.

_____ uncertain

Survey your classmates with these topics or those of their or your choice. Once this experiment has been accomplished, you might want to survey the entire school. Then, gather the data and determine ways to share the information with the rest of the student body.

This information makes an awesome display at a school math fair.