

## Number Sense with Spreadsheets

by Robert Berkman and Thor Charischak

This article will hopefully give you some ideas about what you can do with spreadsheets in teaching number sense.

	A	B	C	D
1				
2				
3				
4				
5				

What you are looking at is a table with many rows and columns. Rows are labeled with numbers and columns are labeled with letters of the alphabet. The intersection of each row and column is called a **cell** and takes its name from the row and column.

### Idea #1: Rounding Off Numbers

A spreadsheet has a formula that rounds off numbers.

- Click on cell A1.
- Type: =round(23.37,1) You should see 23.4 in cell A1.
- What happened? Try some other examples.

	A	B	C
1	<b>23.4</b>		
2			
3			

A good activity for children is for them to “program” the spreadsheet to round off the numbers in a set of cells to different places, and then have them guess what the spreadsheet will show. For example, the spreadsheet below will allow students to enter numbers in the “A” column, and then show the result when rounded off to different places.

	A	B	C	D	E
1	<b>NUMBER</b>	<b>WHOLE #</b>	<b>TENTHS</b>	<b>HUNDREDTHS</b>	<b>THOUSANDTHS</b>
2	<b>0.2425</b>	<b>0</b>	<b>0.2</b>	<b>0.24</b>	<b>0.243</b>
3	<b>0.999</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0.999</b>

- Create the spreadsheet above. (See if you can do it without looking at the spreadsheet below.)

	A	B	C	D	E
1	<b>NUMBER</b>	<b>WHOLE #</b>	<b>TENTHS</b>	<b>HUNDREDTHS</b>	<b>THOUSANDTHS</b>
2	<b>0.2425</b>	<b>=ROUND(A2,0)</b>	<b>=ROUND(A2,1)</b>	<b>=ROUND(A2,2)</b>	<b>=ROUND(A2,3)</b>
3	<b>0.999</b>	<b>=ROUND(A3,0)</b>	<b>=ROUND(A3,1)</b>	<b>=ROUND(A3,2)</b>	<b>=ROUND(A3,3)</b>

- Extend the chart so it includes tens, hundreds, & thousands. (Surprise! You use negative numbers inside the parenthesis.)

In 1978, the first electronic spreadsheet, Visicalc, was created by Dan Bricklin and Bob Frankston for the micro-computer. It was the first time that the average business

There are three types of information you can enter into a cell of a spreadsheet. They are: text, numbers, and formulas. Text and numbers can be entered directly by clicking on a cell and typing the text or number. Formulas need to start with an equal sign.