

No Place Like Home

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Activity #3

Nebraska State Education Content Standards:

Reading/Writing: 8.1.2, 8.2.5, 12.1.1, 12.1.2

Math: 8.1.1, 8.1.2, 8.1.3, 8.2.3, 8.2.5, 8.5.1, 8.5.2, 12.5.2

Social Studies: 8.4.9, 12.4.22

Supplies needed:

Computer, spreadsheet software like: Appleworks , MS Office Excel, or StarOffice. “No Place Like Home” worksheet, pencil

Life Skills:

Keeping records, Wise use of resources, Planning/Organizing, Critical thinking, Decision making, Goal setting, Learning to learn.

Process:

Spreadsheets:

A spreadsheet is a mathematical tool that consists of rows (numbered) and columns (lettered). Where a row and column intersect is a cell. Each cell on a spreadsheet has an address made up of the column and row names. Example addresses would be: B16, A5, AA34, etc. Bingo! Spreadsheets can have around 256 columns and 16,000 rows!

Three types of data can be entered into a cell in a spreadsheet: numbers, text (alphabetic information), and formulas. Numbers typed into a cell will format to the right, text will format to the left in a cell. Formulas need to be preceded with an equals = sign. Cell addresses and numbers can be used in formulas. An example of a formula might look like this: =A12+4*5. The symbol for multiplication is: * (the asterisk) . The division symbol is: / (the slash) . A spreadsheet will follow the rules of mathematical priority: 1-any operations in parentheses (), 2-exponents, 3-multiplication/division, and then 4-addition/subtraction. When entering currency, it is important to enter the number without the dollar sign or comma. You will need to ask the computer to format the number for currency. In Excel, this can be done under Format—Cells—Currency. Make sure you highlight all the cells you wish to have this format first. Percentages need to be typed in as decimals and then formatted for percents. Example: if the federal tax rate is 25%, it would be entered in the spreadsheet as .25. The consumer price index numbers can be entered the way they are found: 101.7, 123.4, 95.6, etc. Any number inside parentheses indicates a negative number: (205.48).

To enter data into a spreadsheet, you must first click on the cell where you want that data or formula to be placed. Type in your text, numbers, or formula. When you press return, your data will be moved to the highlighted cell.

Computer software that has spreadsheets are: Microsoft Office—Excel, AppleWorks—Spreadsheet or StarOffice--Calc. If you do not have a spreadsheet available, this unit could be done with paper and pencil or a calculator.

Other ideas for Activity #3:

Beginning: Use the CD available to collect the data required and have it instantly calculated.

Intermediate: If your students have never used a spreadsheet, a template is provided for them to plug in their data. The formulas are already in place ready to calculate the numbers provided by the student.

Advanced: Have the students re-create the spreadsheet, filling in all the data and creating the formulas needed from scratch.

Generalize:

As you are entering the data you collected and making calculations, are you checking (by estimation) that you are getting reasonable answers? Will you have any money left at the end of a month?

Apply:

Students will build a spreadsheet file in order to make the calculations necessary to compare the cost of living in their home state with some other state. They will need the data they collected in Activity #1 and #2 on the “No Place Like Home” worksheet. They can either fill out the spreadsheet template included with this unit, or create a spreadsheet from scratch. After the spreadsheet is complete, the student will be able to make a determination of which state would be the cheapest to live in.

Lesson Evaluation:

- Students will be able to make a determination regarding the most cost effective place to live between the two states they have studied.