Student Skill Activity:
How to Create and Modify an Electronic Spreadsheet

Why Learn This Skill?

Electronic spreadsheets can help people manage numbers quickly and easily. Historians use spreadsheets to manipulate statistical data easily. You can use a spreadsheet any time a problem involves numbers that can be arranged in rows and columns.

Learning the Skill

A spreadsheet is an electronic worksheet. All spreadsheets follow a basic design of rows and columns. Each *column* (vertical) is assigned a letter or number. Each *row* (horizontal) is assigned a number. Each point where a column and row intersect is called a *cell.* The cell's position on the spreadsheet is labeled according to its corresponding column and row. Therefore, Column A, Row 1 is referred to as cell A1; Column B, Row 2 is B2, and so on.

Spreadsheets use standard formulas to calculate the numbers. You create a simple mathematical equation that uses these standard formulas and the computer does the calculations for you.

Practicing the Skill

Suppose you want to know the population densities (population per square mile) of the individual states in the United States in 1900. Use these steps to create a spreadsheet that will provide this information.

1. In cell A1 type *Country;* in cell B1 type *Population;* in cell C1 type *Land area (square miles);* in cell D1 type *Population per square mile.*
2. In cells A2–A46, type each state's name (there were only 45 states in 1900). In cell A47, type the words *Total for the United States.*
3. In cells B2–B46, enter the population of each state shown in cells A2–A46.
4. In cells C2–C46, enter the land area (square miles) of each state shown in cells A2–A46.
5. In cell D2, create a formula to calculate the population per square mile. The formula for the equation tells what cells (B2 ÷ C2) to divide. Copy this formula into cells D3–D46.
6. Use the process in step 5 to create and copy a formula to calculate the total population of the United States (B2 + B3 + B4 + B5 + B6…) for cell B47.

7. Use the process in step 5 to create and copy a formula to calculate the population per square mile of the United States (B47 ÷ C47) for cell D47.

Applying the Skill

Use a spreadsheet to enter your test scores and your homework grades. At the end of the grading period, create an equation that allows the spreadsheet to calculate your average grade.