The Data Display Window

Let's become familiar with the Data Display Window.

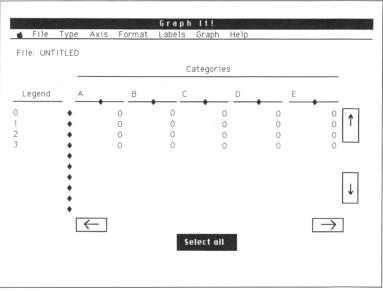


Figure 8

In the upper left hand corner is the name of the file. Since this is a new file, it's named UNTITLED. Centered at the bottom of the screen is a highlighted box that says SELECT ALL. We will discuss the use of this later in this chapter. Also on the screen are four rows for data across, labeled Legend, and five columns down, labeled Categories. The maximum that can be seen in the window at one time is ten rows and five columns of data.

This is similar to the viewing "window" of a spreadsheet. GRAPH IT! data is organized into rows and columns, just like on a spreadsheet. While the total data file might actually be quite large, you can only view a portion of it at a time. GRAPH IT! can handle up to 400 data points in any combination of rows and columns. More on this later.

Moving Around the Data Display Window

You can move around the window by pointing and clicking on the Scroll Arrows located at the bottom and right side of the display window. The Scroll Arrows point up, down, left and right. Each time you point and click on a Scroll Arrow, the viewing window shifts one row or column in the direction selected. Click on → to see the screen shift to view Categories B-F instead of A-E.

NOTE: The Scroll Arrows only work when there is data outside the viewing window.

To move an entire screen at a time, hold down the key while pressing the two keys or clicking on the Scroll Arrows as described above. The sample graph you're creating isn't big enough to demonstrate this feature. At a later time, load in the SAMPLE file to test it out.

Setting Up Your Graph

Let's start creating the graph. To begin, enter the Legend names of the variables you wish to graph. Position the pointer at the 0 under the Legend title and click. The pointer is replaced by a flashing cursor. Type in **SALES** and press **RETURN**. Repeat these steps for Legend numbers 1 through 3 typing in **COSTGOODS**, **OTHER EXP** and **PROFITS**, respectively.

Now position the pointer at the A under the Categories title and click. Type in 1993 and press **RETURN**. Repeat these steps for Categories B through F, typing in 1994, 1995, 1996, 1997, and 1998 respectively. If you make a typing error simply press **DELETE** and retype. After entering the last year, use the Scroll Arrows to return the Data Display Window to its initial position.

Now you're ready to begin entering the data for your graph, manually for this exercise. You can also import data directly from an AppleWorks or other text file, as described in the next chapter.

Position the pointer at the first cell and click. This cell becomes highlighted and ready for you to enter your data. Type in **75** and press **RETURN**. The cell stays highlighted, but 75 has been entered as your first data point.

Move the pointer down to the next cell, click on it and then type 40. This time, instead of pressing **RETURN**, move the pointer down to the next cell and click. This highlights the next cell for data entry and automatically enters the previous data point. In the third cell, type in 20. Move the pointer to the last cell in the first Category, click, and then type 15. Move to the next category and repeat these steps using the following data:

	1994	1995	1996	1997	1998
SALES	100	120	130	150	175
COSTGOODS	55	60	66	72	77
OTHER EXP	25	28	30	32	35
PROFITS	20	32	34	46	63

Saving Your Data File

Take a moment here to practice good computer procedure by saving what you've done so far. Position the pointer on the FILE menu, click on it and hold down the button. Drag down the pointer until Save Data As... is highlighted and release the mouse button. A dialog box will appear on your screen:

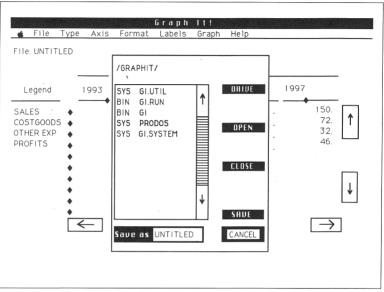


Figure 9

Remove your GRAPH IT! program disk from the drive and insert a blank formatted disk. Click on Drive until it reads the catalog of the current drive. Move the pointer to the Save As box at the bottom of the dialog box and click. Type in **FIRSTGRAPH** and press **RETURN**. Move the pointer over to the Save button and click on it. The pointer changes into the hourglass icon while the program saves your file. Notice that in the upper left hand corner of your Data Display Window the name of your new file is now shown.

Viewing the Graph

Now let's see how the data you've entered looks in graph form. Move the pointer over to the Select All box at the bottom center of the Data Display Window and click. All of the data you've entered becomes highlighted. This tells GRAPH IT! that you want to look at all of the data in your graph. As you'll see in a few minutes, you can also choose to graph only part of the data.

Now, move the pointer to the GRAPH menu. Click and drag until Graph is highlighted and release. In just a few seconds, you'll see your first graph spring to life. Congratulations! Your screen should look like Figure 10:

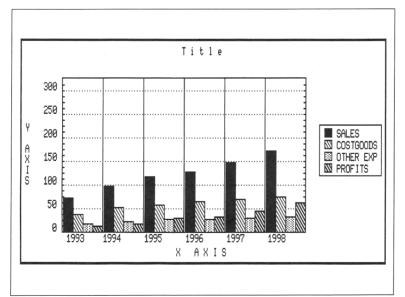


Figure 10

Looks pretty good, doesn't it? But as you can see, it's not quite finished. You need to add some labels to complete the picture.

Adding the Finishing Touches

Click on the mouse button, and you will see the Data Display Window reappear. Move the pointer to the LABELS menu. Click and drag until Edit Title is highlighted; then release the mouse button. Type in **ABC CORPORATION SALES and PROFITS** and then press **RETURN**.

Next, you're going to enter labels for the X- and Y-Axis of your chart. The X-Axis shows Categories while the Y-Axis shows the values of the data being graphed. Again, move the pointer to the LABELS menu and select Edit X-Axis... Type in **YEAR** and press **RETURN**. Then select Edit Y-Axis from the LABELS menu and type **DOLLARS** IN THOUSANDS. Press **RETURN**. Next, go to the GRAPH menu and select Graph to see what your graph looks like with the titles in place. Wow! We have to see this on paper.

Printing Your Graph

First, save the completed file. Click on the mouse button to return to the Data Display Window. Go to the FILE menu and select Save Data. Your updated file will automatically be saved as FIRSTGRAPH.

If you haven't already turned your printer on, do so now. Position the pointer on the FILE menu again, drag it down until Print is highlighted and release the mouse button. Now watch while your graph takes shape on paper. Beautiful!

Checking Out Some Options

You now know most of what you need to know to create first-class graphs. But you've barely touched on the capabilities of GRAPH IT! Let's spend the rest of the time here in the Mini-manual exploring a few of the program's options.

Changing Categories and Legends

If you look at the graph you've created, you get a pretty good idea of the growth of sales and profits of ABC Corporation over the last six years. But can you more directly compare each year's growth by each variable? You bet

Place the pointer on the AXIS menu and drag until Swap Axis is highlighted and release the mouse button. Now, move the pointer to the LABELS menu and drag down until Display X-Axis is highlighted.

Notice that there is a check mark just to the left of this menu option. This means that the X-Axis label will be displayed. Releasing the mouse button now will de-select this option, meaning the X-Axis will no longer be displayed. To confirm, place the pointer at the LABELS menu and hold down the button. Notice that there is no longer a check mark by the Display X-Axis option.

Now, place the pointer at the GRAPH menu and select Graph. You now have direct yearly comparisons for each variable and can see clearly the year-to-year progress for each. Notice also that with the X-Axis label removed, your graph is somewhat taller. Click on the mouse button to return to the Data Display Window.

Let's Slice the Pie

Perhaps you want to look at how expenses and profits relate to one another for only the year 1994. You might decide that it would be best to do this as a pie chart.

Place the pointer at the AXIS menu and select Swap Axis to return the graphing of the Legend and Categories data points to their default positions. Now, move the pointer to the TYPE menu to select a different type of graph.

At the TYPE menu drag the pointer down until Pie Chart is highlighted and then release the button. Now, move the pointer to the COSTGOODS 1994 cell and click. The cell becomes highlighted. Holding down the mouse button, drag down until the OTHER EXP and PROFITS cells for 1994 are also highlighted and release the button.

You've now chosen to look at just that information for 1994 in pie chart form. Select Graph from the GRAPH menu and take a look.

The pie chart could use a few minor changes. Go into the LABELS menu to edit the Title and to de-select the display of the Y-Axis. Then go into the FORMAT menu, de-select the Chart Border (works the same way as de-selecting the Y-Axis) and select Graph from the GRAPH menu again to make sure the chart is how you want it to look. Now select Print from the FILE menu. Your printed version might look like this: