

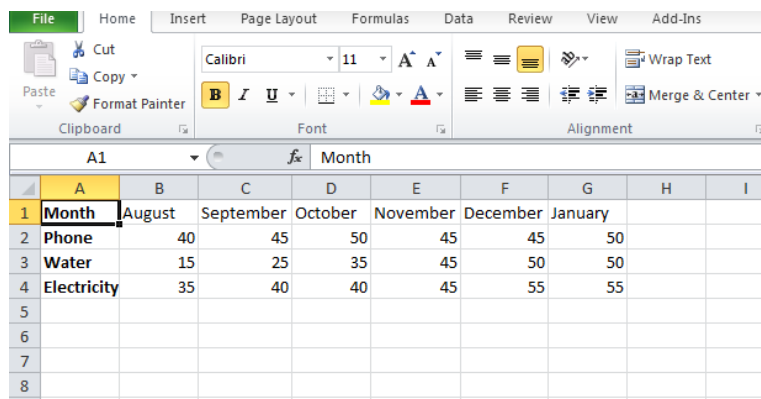
Line Graphs Made Easy

Using Excel 2010

This graphing assignment may sound like a pain, but learning how to use Excel effectively is a real life skill. For this guide, I'm using an everyday example of how to keep track of finances in this program. Graphing your utilities per month or other expenditures is a great way to analyze your spending habits and find ways to save some money.

Note: Anything outlined in **red** is a graphic I added to the screenshot for emphasis, not an Excel feature. Also, these numbers have just been made up for illustrative purposes.

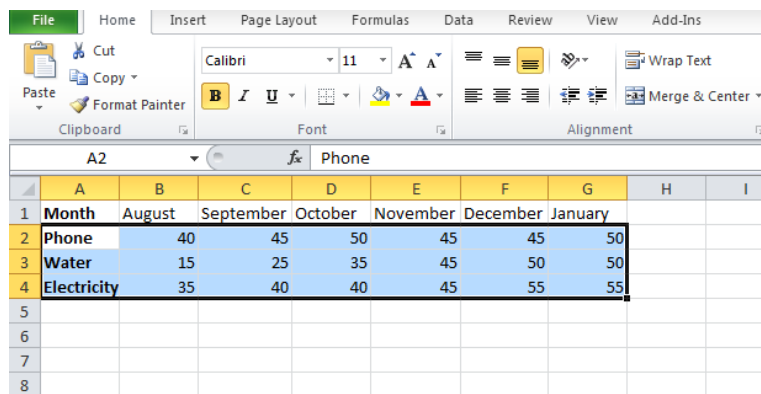
The first step is actually typing your data into a worksheet. You can put it either vertically or horizontally, just as long as it's logically organized.



The screenshot shows the Microsoft Excel 2010 interface. The ribbon is set to 'Home', and the 'Font' and 'Alignment' groups are visible. The active cell is A1, containing the text 'Month'. The worksheet contains the following data:

Month	August	September	October	November	December	January
Phone	40	45	50	45	45	50
Water	15	25	35	45	50	50
Electricity	35	40	40	45	55	55

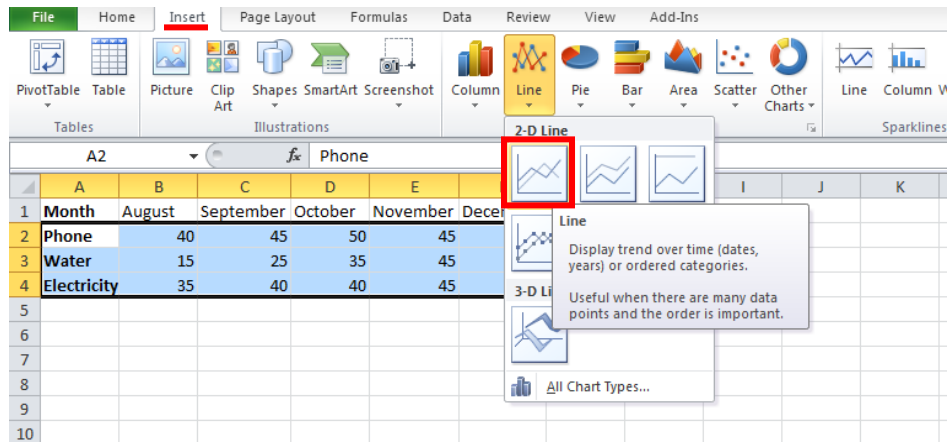
Next, highlight the data you want to display in the graph. I'm purposely not selecting the "Month" category for reasons that will become apparent later.



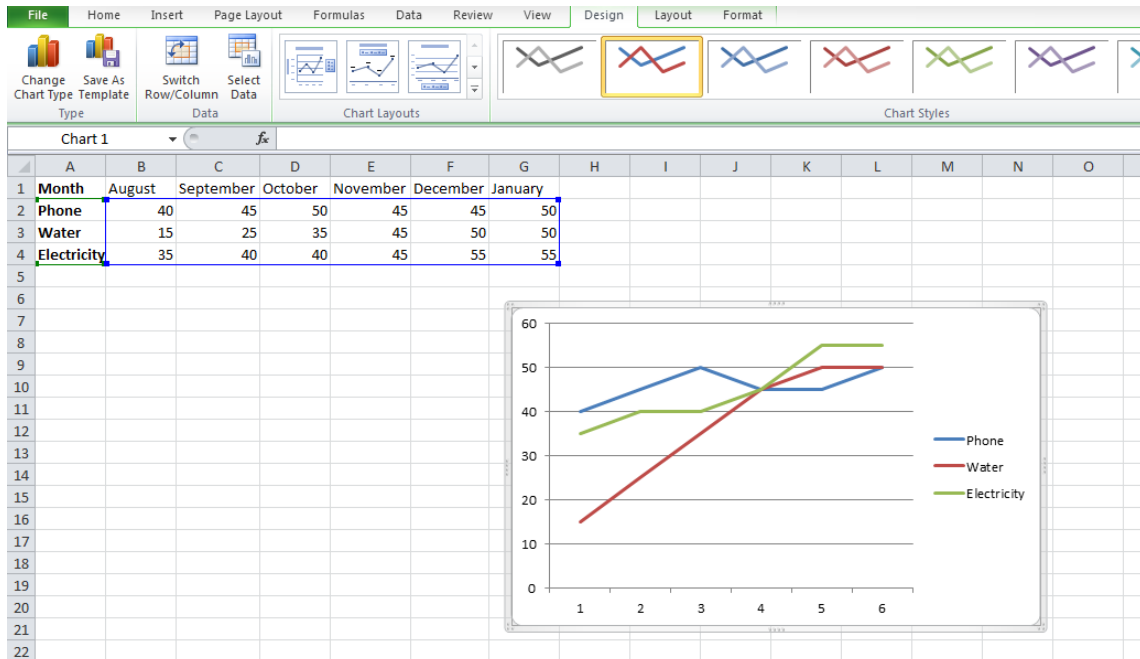
The screenshot shows the same Microsoft Excel 2010 interface. The active cell is now A2, containing the text 'Phone'. The data rows for 'Phone', 'Water', and 'Electricity' are highlighted in blue, indicating they are selected for graphing.

Month	August	September	October	November	December	January
Phone	40	45	50	45	45	50
Water	15	25	35	45	50	50
Electricity	35	40	40	45	55	55

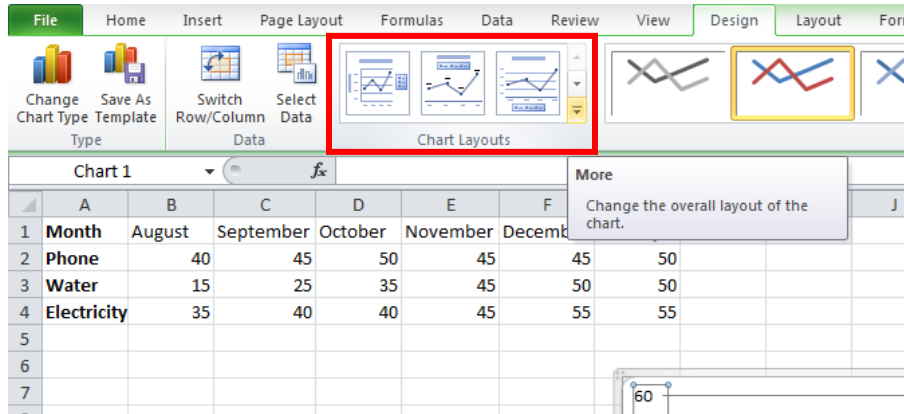
To create the graph, go to the “Insert” tab at the top, and click “Line” in the “Charts” portion of the ribbon. The first 2D option is the simplest, and all we need for this exercise. Try to avoid overly fancy 3D charts.



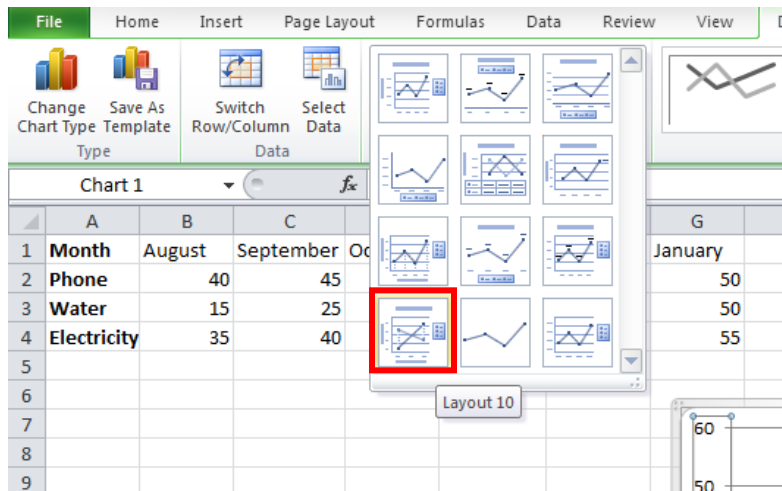
Once you click it, voila! We have a graph! But we’re not quite done for several reasons. First, the assignment calls for axis labels and a title, but we have none. Also, the x-axis hasn’t been formatted yet to show time. When you create a graph either without selecting an x-axis series, or if Excel doesn’t understand what values you meant for time, it defaults the axis to just numbers. This x-axis reads 1 through 6 because I have 6 columns of data that it wants to keep in the right order.



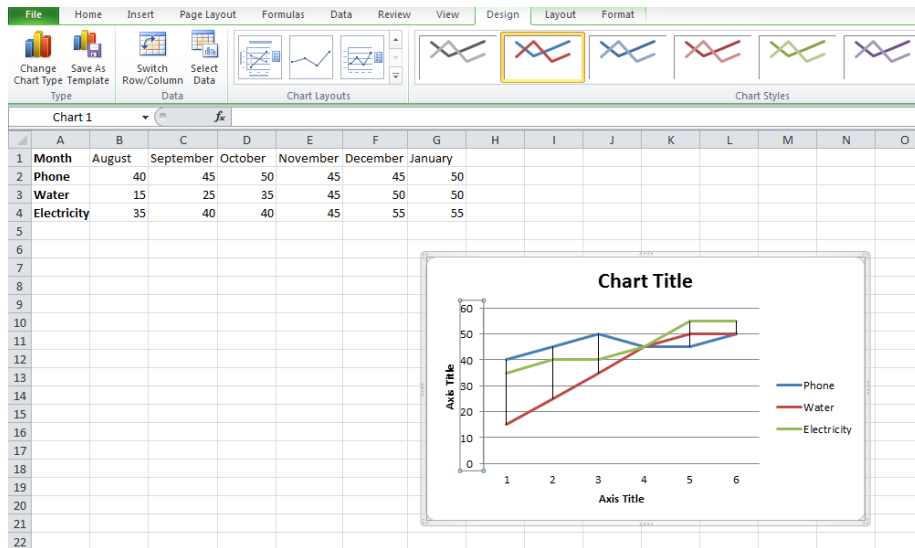
We'll start with adding labels and a title. Go to the "Chart Layouts" section of the "Design" tab (which should have automatically opened when you created the graph). Click the downward arrow to see more options. Each thumbnail diagram shows you what features each layout has, and we need to find one with both axis labels, a title, and a legend to tell apart our lines.



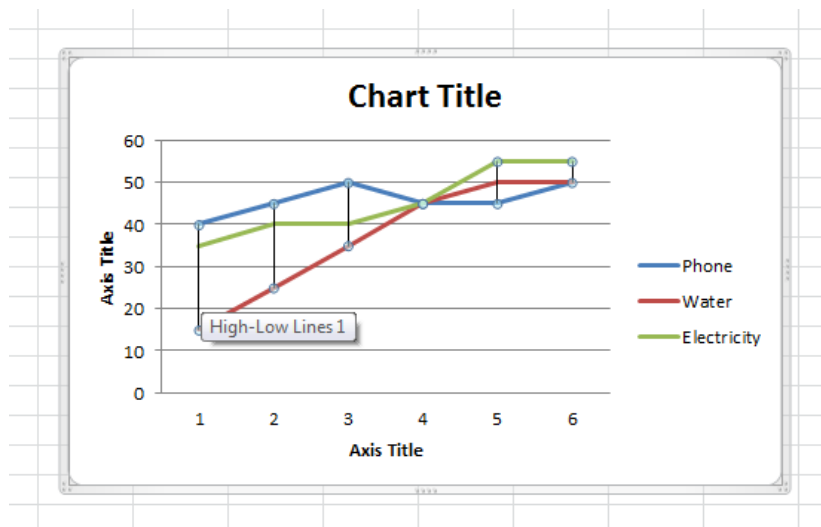
Bingo! Layout 10 has all of the necessary parts. Click!



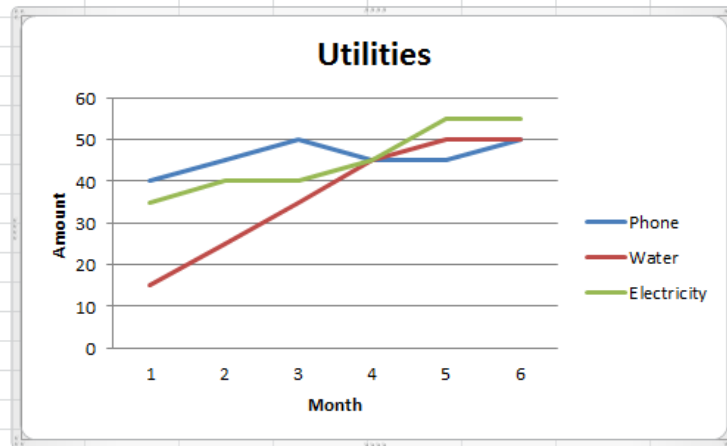
Now our graph has blank text boxes for us to fill in appropriate labels. The legend is already okay since we highlighted the leftmost column when creating the graph in the first place.



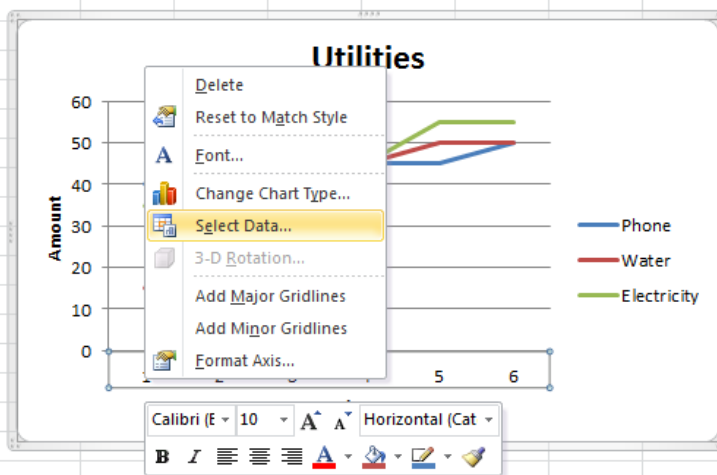
The only problem with Layout 10 is that it comes with one extra feature I don't really like: high-low lines. We don't need them for the way we're going to display the data, so I recommend selecting them and hitting Delete.



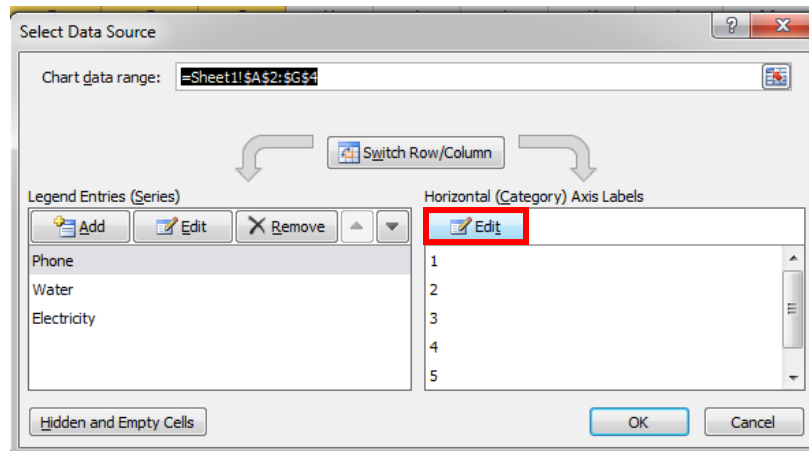
Then go ahead and click on the text boxes for each title to change it to something appropriate to your data.



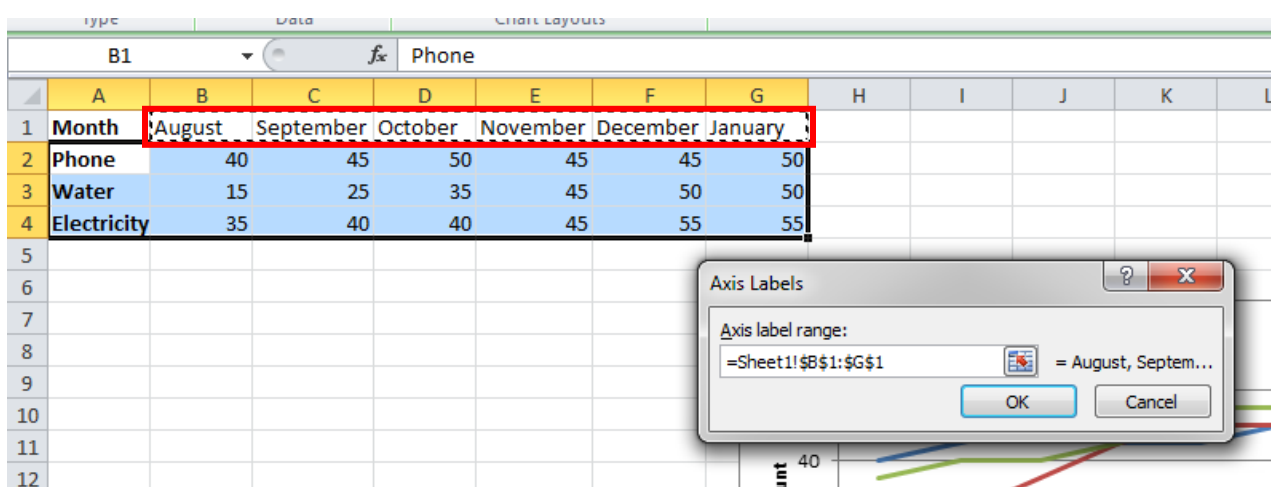
Our last step is fixing that x-axis so that it reads month names instead of numbers. To do this, we're going to manually tell Excel exactly where to find that data. Start by right-clicking on the x-axis to get this menu. Then click the "Select Data..." option.



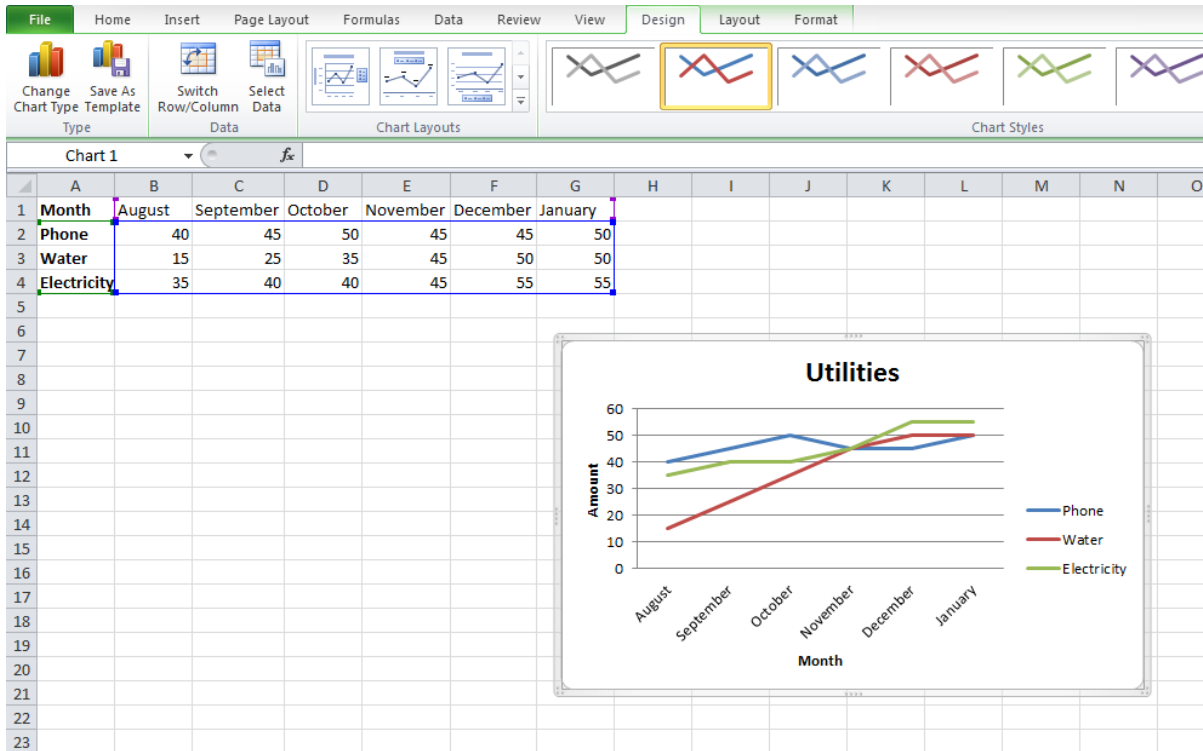
As previously stated, our “Legend Entries” are just fine, so leave that alone. Instead we’ll click the “Edit” button under “Horizontal (Category) Axis Labels” since that’s what needs to be changed. If you’re not sure, just look at what’s displayed under that column. Right now it has the 1-6 we see on our x-axis.



When the Axis Labels window pops up, the numbers and symbols under “Axis label range” is already highlighted. This means that whatever cells or rows you select on the data sheet are going to automatically change those highlighted values. The data we want to go in our x-axis is that first row of month names, so we highlight all 6 (but not the word “Month” itself since we already have that on our axis title).



Click OK on that box, and then hit OK again on the Select Data box. Now our graph is properly labeled!



I suggest printing it by first copying the graph into a Word document.

Play around with some of the options if you want to change the way your graph looks as far as colors or gridlines. Explore the data analysis possibilities!

Go forth, and use Excel wisely!