This activity will unlock some of the capabilities of Excel as we build a mock report card.

Let’s get started.

1. Open Excel. Your screen will show a blank worksheet like the figure to the left.

2. Select the Open command from the Toolbar (circled at left). A new window displaying the available files will appear. Select Report Card from the files shown. If you cannot locate the Report Card file make sure that your computer is looking in the correct volume.

3. The Report Card file has two worksheets ‘Data’ and ‘Report Card’ as indicated by the tabs in the lower left corner. The active worksheet is highlighted in white. Select the ‘Data’ worksheet by clicking on it.

4. Type the name of your school in cell B1.

5. Type in your name cell B3.

6. Notice in cells A7-A11 five courses are listed with a series of quiz, test and homework grades. Cells G7-G11 are empty. These cells will be the Quiz Averages for each class. Similarly, cells L7-L11 will be the Test Averages and cells P7-P11 will be the total Numerical Average.
7. Click on cell G7. Next click on the $\text{fx}$ icon located on the tool bar (shown in the figure at left).

8. The Insert Function window will appear. Using the scroll bar on the left side of the window scroll down to the AVERAGE Command. Select AVERAGE by clicking on it.

Click OK.

9. The Function Arguments window will appear. Position your cursor over cell B7. Click and hold down the mouse button. A dotted box will appear over cell B7. With the mouse button still depressed move the mouse to F7. Release the button. Notice the dotted box now contains cells B7-F7 and Number 1 filed in the Function Arguments window is now populated with the cell address of B7:F7.

Click OK.

Cell G7 now contains the average of the quiz grades for English.

10. Now we want to compute the averages for the other four subjects. We could repeat the process four more times but instead we will copy the formula from G7 to cells G8-G11.

Click on G7. Select the Copy command from the Edit menu. Now highlight cells G8-G11 using the click and hold technique. Select the Paste command from the Edit menu. The formula from G7 is now copied to cells G8-G11.

11. In similar fashion, compute the Test Averages in cells L7-L11.

12. To compute the Numerical Averages in cells P7-P11 we must compute a weighted average of the quizzes, tests, and homework. To do this we click on P7 and press $=$ to enter our formula. Enter the following keystrokes: G7*H7+L7*M7+N7*O7 and press enter. Cell P7 should now have the Numerical Average of the English grades. As with step 10, copy the formula to cells P8-P11.
13. Now your data worksheet is complete. Click on the Report Card tab at the bottom left to view the report card.

Further Exploration:

- Click on Cell B3 of the Report Card worksheet. Notice the formula Data!B1. The cell address contains the worksheet name followed by the cell address. Thus you can copy data from one sheet to another.

- Cell G17 of the Report Card worksheet contains a logical IF statement (actually four IF statements nested in a single statement). Excel has many powerful operators that can be used to add value to your worksheet. Experiment with other Function commands; the Help menu will help you with the syntax.