


VLOOKUP Function


 The first function we are going to review is called VLOOKUP. The VLOOKUP performs a *vertical* lookup by locating an item in the first column of a table and then searches in the corresponding columns to the right.

 Display the **VLOOKUP FUNCTION INTRO** spreadsheet.

 Review the function arguments, syntax and example.

USING THE VLOOKUP FUNCTION

1. Display the **VLOOKUP** spreadsheet.

 I'm going to use the **VLOOKUP** function to insert the employee's **Division** name by looking up the employee number, **EMP218** in **CELL B3**.

 Click in cell B4 and type: **=VLOOKUP(B3, B10:K203, 7)** and press **{ENTER}**.

 Select the range **B3** in the formula bar.

 Press the function key **F4** on the keyboard to make cell references absolute.


 Select the range **B10:K203** in the formula bar.

 Press the function key **F4** on the keyboard to make cell references absolute.


Tip: Use **CTRL + '** to duplicate information from the cell above into the current cell.

 Now I'm going to duplicate the **VLOOKUP** function to insert the **Gross Pay** amount.

 Click **CELL B5** and press **CTRL + '** to duplicate the above formula.

 **Ask Class:** What column number do I need to specify to retrieve the **Gross Pay** information?

 Change the **COL_INDEX_NUM** to **10**.

 Press **ENTER** to complete the change.

2. Keep the workbook open for the next exercise.

LOCATING MISSING RECORDS USING VLOOKUP



In this next exercise one sheet has a master list of all employees.



Display the **VLOOKUP MASTER LIST** worksheet.



The second sheet has the print out of the check run.



Display the **VLOOKUP FIND MISSING** worksheet.



We will use the VLOOKUP function to compare the records to see if any records are missing.

Tip: If you want to find an actual question mark or asterisk, type a tilde (~) preceding the character



Display the **VLOOKUP MASTER LIST** worksheet and click cell **L6**.



Type the follow formula and press **{ENTER}**:

=VLOOKUP(B6, 'VLOOKUP Find Missing'!C4:L194,1,FALSE)



I'm going to show you a shortcut to make the range used in the formula absolute. This will keep the cell references from changing when dragging using the **AutoFill** handle.



Select the range **C4:L194** in the formula bar.



Press the function key **F4** on the keyboard to make cell references absolute.



Click the **ENTER** button  or press **{ENTER}**



Use **AUTOFILL** to copy the formula down the entire column.



Notice the rows where **#N/A** displays for the result. The **#N/A** indicates a matching record could not be found. These are the missing records.



Save and keep the workbook open for the next exercise.

HLOOKUP Function



Now we'll look at the HLOOKUP function. The HLOOKUP performs a *horizontal* lookup by locating an item in the first row of a table and then searches in the corresponding rows below.










Display the **HLOOKUP FUNCTION INTRO** spreadsheet.






Review the function arguments, syntax and example.




USING THE HLOOKUP FUNCTION

-  Display the **HLOOKUP** spreadsheet.
-  We're going to use the HLOOKUP function to look up the **Division** and **Gross Pay** information based on the Employee number 191.
-  Click in **CELL B4**.
-  Type the following formula and press **{ENTER}**:
=HLOOKUP(B3,EmployeeList,7,FALSE)
-  Instead of manually typing the tab sheet name and cell range as I did for the VLOOKUP function, I am using a **defined name** for **cells C7:S16**.
-  Click in **CELL B5**.
-  Type the following formula and press **{ENTER}**:
=HLOOKUP(B3,EmployeeList,10,FALSE)





LEFT and FIND Functions

-  Now we are going to look at how to use the **LEFT** and **FIND** functions.
-  There are times when it takes more than one function to find an answer you need. You can combine functions in one cell. This is called **nesting functions**.
-  First let's look at each function separately to see how they work and then we will combine them.











LEFT FUNCTION OVERVIEW

-  Display the **LEFT FUNCTION INTRO** spreadsheet.
-  The **LEFT** function is used to locate and return a number of characters starting from the left side of the cell.
-  Review the function arguments, syntax and example.

FIND FUNCTION OVERVIEW

-  Display the **FIND FUNCTION INTRO** spreadsheet.
-  The **FIND** function looks for a character that you specify and returns the number position of that character in the cell.
-  The **FIND** is case sensitive. Always be sure to type your character using the correct case.
-  Review the function arguments, syntax and example.

USING LEFT AND FIND FUNCTIONS TOGETHER

-  Display the **LEFT_FIND TOGETHER INTRO** spreadsheet.
-  Now that you know the **FIND** function can give you the location of a specific character, you can use that information to help you with the **LEFT** function.
-  Here is our example scenario: we would like to separate the first names from the text string in a cell.
-  Review the function arguments, syntax and example.
-  Now we are going to look at using the **LEFT** and **FIND** functions together to extract user names from email addresses.
-  Display the **LEFT_FIND TOGETHER** spreadsheet.
-  Click in **CELL B2**.
-  Type the following formula and press **{ENTER}**:
=LEFT(A2,FIND("@",A2,1)-1)
-  Use **AUTOFILL** to copy the formula down the column.
-  Save the workbook.