How To Use VLOOKUP in Excel

This short tutorial uses Excel 2010 and sample file to show you a working example of the VLOOKUP function.

Article reference: http://www.timeatlas.com/5_minute_tips/general/learning_vlookup_in_excel
Excel sample file: http://static.timeatlas.com/tutorials/VLOOKUP_Example.xls
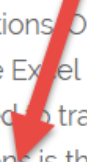Video reference: http://www.timeatlas.com/news/projects/vlookup_demo

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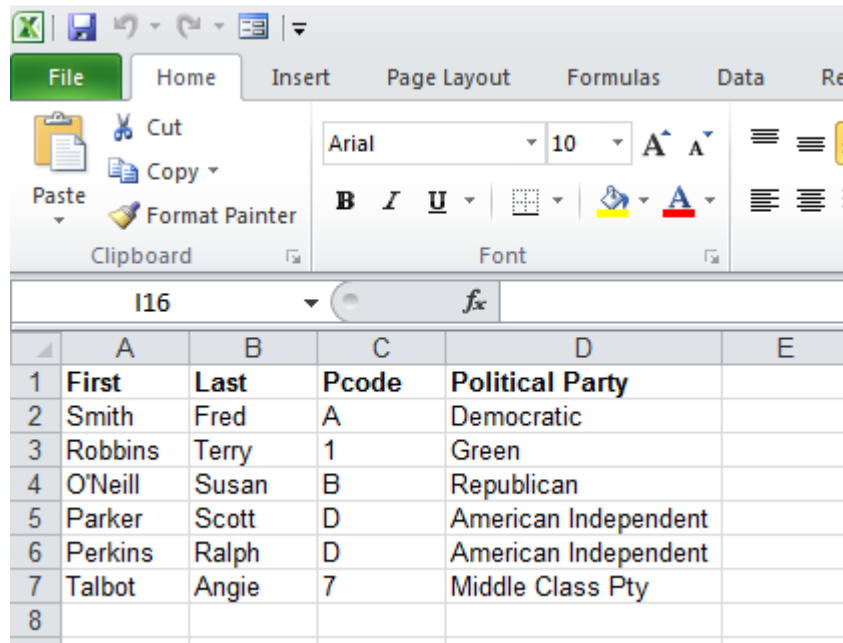**1. Download the Excel VLOOKUP sample file shown in the More VLOOKUP References section**

Note: For this tutorial, we will be deleting information on this sheet and recreating the VLOOKUP formula.
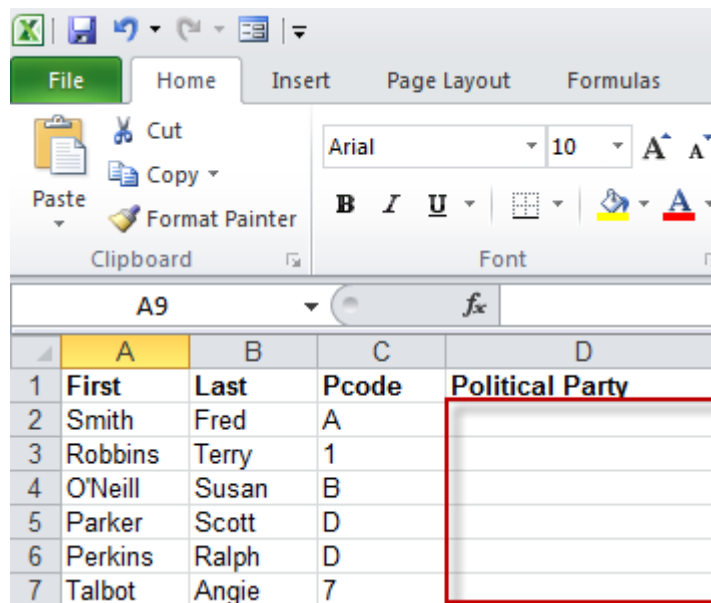
2. Open the sample file you downloaded from above in Excel.

The workbook will have 2 sheets at the bottom: **Voters** and **Party Codes.** The first sheet is a listing of registered voters and the second contains names of political parties.

3. Delete the cell entries for D2:D7 because we will be rebuilding the formula.

Note: You can keep the column header "Politcal Party".

4. Place your cursor in cell D2. Click the Formulas tab and select Insert Function.
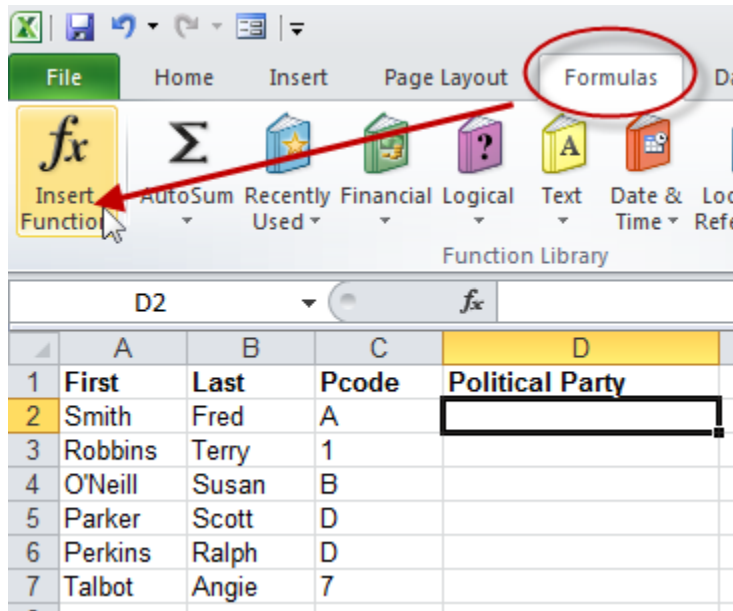
5. In the Search for a function: text box type "vlookup" and click the Go button.

6. Highlight VLOOKUP and click OK.

	CONCATENATE		▾	✕ ✓ fx	=			
◢	A	B	C	D	E	F	G	H
1	**First**	**Last**	**Pcode**	**Political Party**				
2	Smith	Fred	A	=				
3	Robbins	Terry	1					
4	O'Neill	Susan	B					
5	Parker	Scott	D					
6	Perkins	Ralph	D					
7	Talbot	Angie	7					
8								
9								
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11								
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22								
23								
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25								

Insert Function

Search for a function:

vlookup   Go

Or select a category: Recommended ▾

Select a function:

VLOOKUP
LOOKUP
HLOOKUP
IF

VLOOKUP(lookup_value,table_array,col_index_num,range_lookup)
Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Help on this function   OK   Cancel

7. Now we will create the VLOOKUP formula that will translate the "A" Pcode in cell C2 to the description found from the Party Codes worksheet.

Note: VLOOKUP relies on 4 function arguments which are numbered above. The last item, Range_lookup [4] is optional and can be blank.

8. In the Lookup_value text box, type "C2"

In this step, we're asking excel to look up the contents of cell "c2". Notice how Excel displays the cell's value of "A" to the right of the text box. This helps you check your entries. Also, note in the red boxed area with the green star that Excel provides some info about the function argument.

9. In the Table_array text box, select the area Excel should use to find the description. Click the Party Codes worksheet and highlight the range A2:B45.

	A	B
	PARTY CODE	**NAME**
1		
17	16	God, Truth & Love Party
18	17	Superhappy Party
19	18	Working Families Party
20	A	Democratic
21	B	Republican
22	C	Decline to State
23	D	American Independent
24	E	Citizen Party
25	F	Communist
26	G	Conservative
27	H	Environmentalist
28	I	Ind. Progressive
29	J	Liberal
30	K	Peace & Freedom
31	L	Prohibition
32	M	New Economy
33	N	Socialist
34	O	Socialist Labor
35	P	Pot Party
36	Q	Libertarian
37	R	Amer. Natl. Socialist
38	S	Poor People's Party
39	T	Free
40	U	National
41	V	Constitution Party
42	W	Vision
43	X	Puritan
44	Y	Federal
45	Z	Misc.
46		

Formula bar: =VLOOKUP(c2,'Party Codes'!A2:B45)

Function Arguments

VLOOKUP

Lookup_value: c2 = "A"

Table_array: 'Party Codes'!A2:B45 = {1,"Green";2,"Reform";3,"Whig";4,"I...

Col_index_num: = number

Range_lookup: = logical

=

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Lookup_value is the value to be found in the first column of the table, and can be a value, a reference, or a text string.

Formula result =

Help on this function

OK   Cancel

Voters | Party Codes

Notice how Excel adds the worksheet name and range as you highlight an area.

10. In the Col_index_num field, type "2". This is our index column from the Party Codes worksheet that contains the descriptions of the political parties.

As before, Excel builds the cell's formula as we add the function arguments and shows the value it read. For the cell C2, Excel is saying the Pcode of "A" translates to "Democratic"

11. In the Range_lookup, type "false" as we want exact matches.

	A	B	C	D	E	F	G	H
	VLOOKUP			=VLOOKUP(c2,'Party Codes'!A2:B45,2,false)				
1	First	Last	Pcode	**Political Party**				
2	Smith	Fred	A	s'!A2:B45,2,false)				
3	Robbins	Terry	1					
4	O'Neill	Susan	B					
5	Parker	Scott	D					
6	Perkins	Ralph	D					
7	Talbot	Angie	7					
8								

Function Arguments [?] [X]

VLOOKUP

Lookup_value	c2	= "A"
Table_array	'Party Codes'!A2:B45	= {1,"Green";2,"Reform";3,"Whig";4,"Islar
Col_index_num	2	= 2
Range_lookup	false	= FALSE

= "Democratic"

Looks for a value in the leftmost column of a table, and then returns a value in the same row from a column you specify. By default, the table must be sorted in an ascending order.

Range_lookup is a logical value: to find the closest match in the first column (sorted in ascending order) = TRUE or omitted; find an exact match = FALSE.

Formula result = Democratic

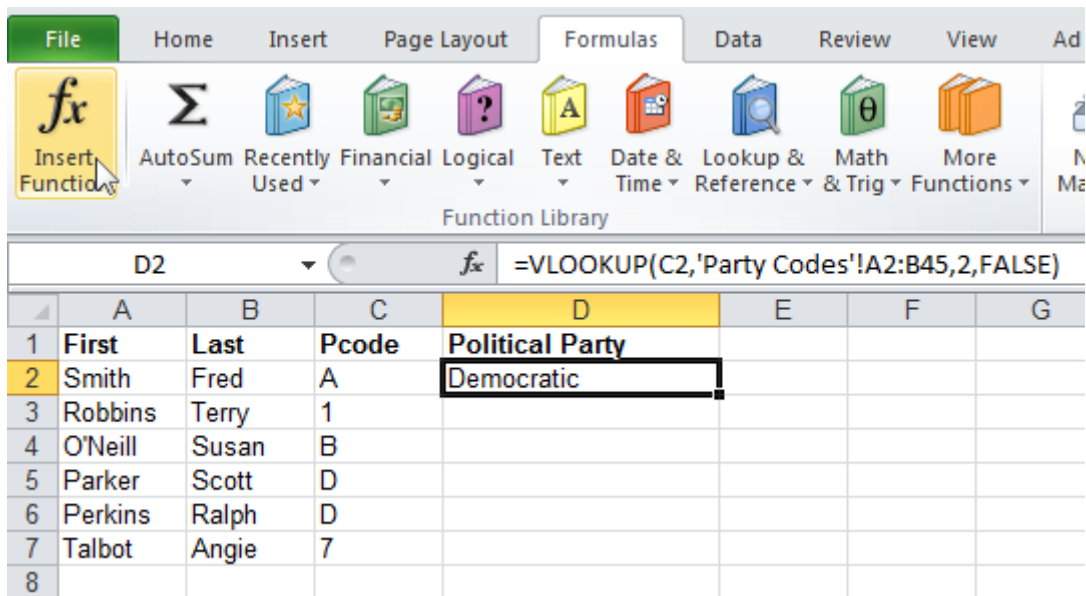Help on this function   [OK]   [Cancel]

Note: Excel also provides tips for the function arguments below the text boxes.

12. Click OK
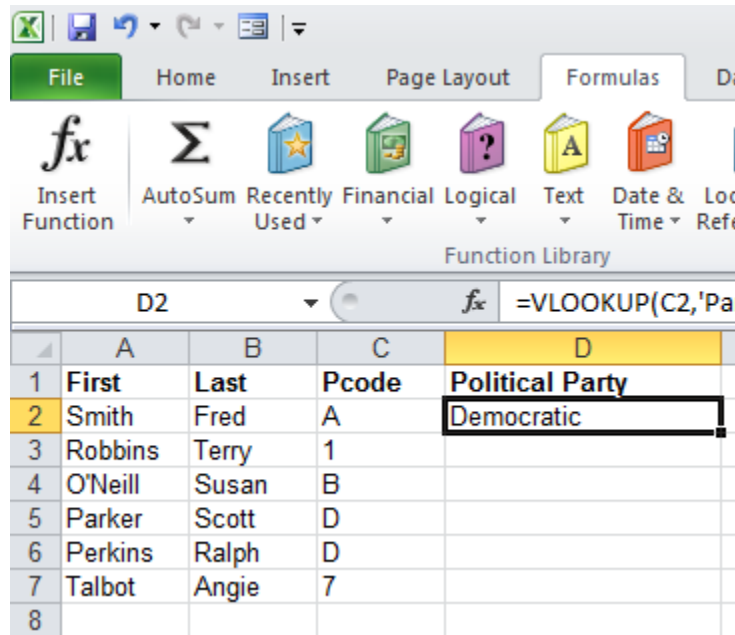
Note how Excel translated the formula to "Democratic"

13. If you plan to copy this formula to other cells, you need to make an adjustment. Click the Insert Function button again.

Note: You can make edits using the formula bar, but if you're just starting out, I find it easier to use the dialog box.

14. Edit the Table_array value by placing $ signs around the cell references. This makes the cell reference absolute.
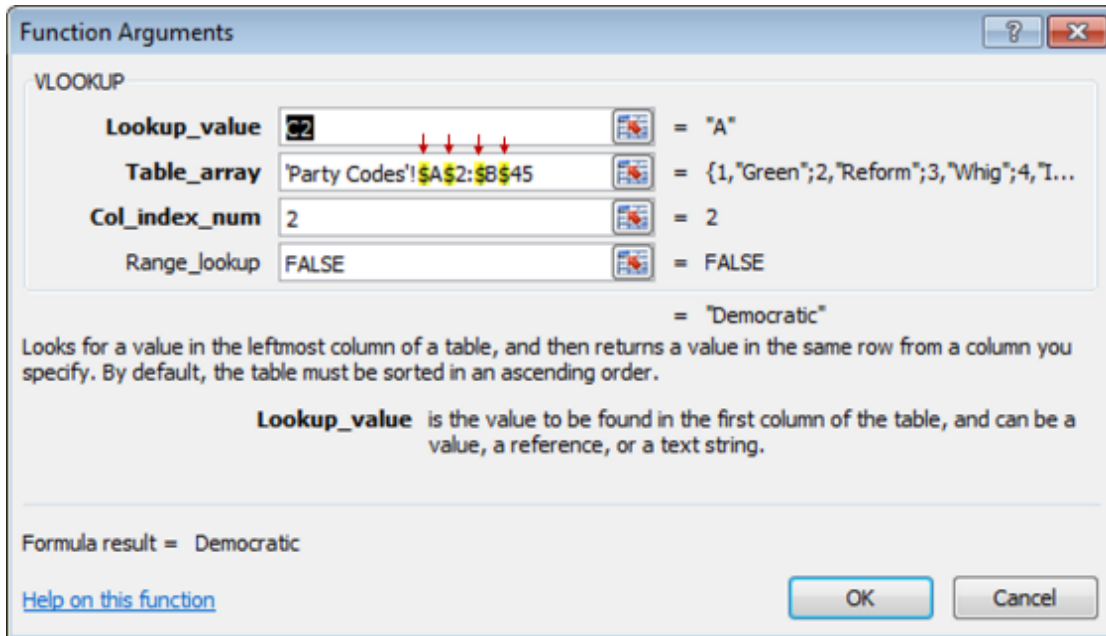
Note how the $ precedes the column and row references.

15. Copy your formula to other cells in the column by dragging down.