

Spreadsheets

Vlookups

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Task Overview

Objectives

Understand the use of the Vlookup function

Understand the use of absolute cell referencing.

Understand the use of an nested if statement.

Understand the used of the different count functions.

Understand the use of the sumif function.

Outcomes

Complete the vlookup task.

Task 1 to Task 4

Time

Vlookup

Using **VLOOKUP** is similar to looking up a person's name in a telephone book to get a telephone number.

VLOOKUP looks at a value in one column, and finds its corresponding value on the same row in another column.

Table_Array or lookup table

BOOK NAME (Lookup Value)	Author (LOOKUP)	Shop (LOOKUP)	Stock Level (Lookup)	Stock Levels (Nested IF)	Rating (Lookup)	Price (Lookup)	Discount (Lookup)	Discount Value (Price * percentage)	Final Price (Price-Discount Value)
Divergent									
The Fall of Arthur									
The Heroes of Olympus Book									
Catching Fire									
Insurgent									
The Hunger Games									
The Lost Hero									
Harry Potter and the Sorcerer's Stone									
The Scorch Trials									
The Hobbit									
Mockingjay									
The Maze Runner									
Harry Potter And The Chamber Of Secrets									
The Lightning Thief									
Harry Potter and the Half-Blood Prince									
The Train's Curse									
The Heroes of Olympus									
The Rule of Thoughts									
Year of the Jungle									
Harry Potter and the Deathly Hallows									
The House of Hades									
The Fault in Our Stars									
The Kane Chronicles									
Harry Potter And The Order Of The Phoenix									
The Eye of Minds									

BOOK NAME (Lookup Value)	Author	Shop	Stock Level	Rating	Price	Discount
Catching Fire	Suzanne Collins	Amazon	5	5'	€ 4.00	10%
The Fall of Arthur	J. R. R. Tolkien	Powell's Books	4	5'	€ 6.00	5%
Harry Potter And The Goblet Of Fire	J. K. Rowling	Virgin	0	4'	€ 4.00	7%
Insurgent	Veronica Roth	Powell's Books	15	3'	€ 5.00	5%
The Hunger Games	Suzanne Collins	Amazon	0	5'	€ 4.00	5%
The Heroes of Olympus	Rick Riordan	Powell's Books	12	5'	€ 4.00	10%
Harry Potter and the Sorcerer's Stone	J. K. Rowling	Books A Million	0	4'	€ 4.00	7%
Allegiant	Veronica Roth	Amazon	4	5'	€ 6.00	5%
The Fault in Our Stars	John Green	Amazon	0	3'	€ 4.00	5%
Mockingjay	Suzanne Collins	abebooks	3	5'	€ 4.00	7%
The Scorch Trials	James Dashner	abebooks	0	5'	€ 4.00	5%
Harry Potter And The Chamber Of Secrets	J. K. Rowling	Virgin	0	4'	€ 6.00	5%
The Lightning Thief	Rick Riordan	Amazon	4	5'	€ 4.00	10%
The Maze Runner	James Dashner	abebooks	11	4'	€ 4.00	7%
Looking for Alaska	John Green	Amazon	0	3'	€ 6.00	5%
The Last Olympian	Rick Riordan	Virgin	8	5'	€ 5.00	5%
The Rule of Thoughts	James Dashner	Powell's Books	0	5'	€ 6.00	7%
The Titan's Curse	Rick Riordan	abebooks	3	5'	€ 4.00	5%
Harry Potter and the Deathly Hallows	J. K. Rowling	Amazon	6	5'	€ 4.00	7%
Gregor The Overlander	Suzanne Collins	Amazon	5	5'	€ 4.00	10%
Divergent	Veronica Roth	abebooks	15	5'	€ 6.00	7%
The Lost Hero	Rick Riordan	Amazon	0	4'	€ 4.00	5%
The Death Cue	James Dashner	Amazon	4	5'	€ 6.00	5%
Harry Potter and the Half-Blood Prince	J. K. Rowling	Amazon	0	4'	€ 4.00	10%
Year of the Jungle	Suzanne Collins	Amazon	3	5'	€ 6.00	7%
The Hobbit	J. R. R. Tolkien	Powell's Books	14	3'	€ 4.00	5%
The Heroes of Olympus Book	Rick Riordan	Virgin	2	5'	€ 4.00	5%
Harry Potter And The Order Of The Phoenix	J. K. Rowling	Amazon	12	5'	€ 4.00	5%
The Eye of Minds	James Dashner	Amazon	2	5'	€ 6.00	10%
Harry Potter and the Prisoner of Azkaban	J. K. Rowling	Amazon	0	4'	€ 4.00	5%

We need to use a lookup function to find the corresponding data from the lookup table for each book title .

Vlookup

1. Lookup_Value

BOOK NAME (Lookup Value)	Author (LOOKUP)	Shop (LOOKUP)	Stock Level (Lookup)	Stock Levels (Nested I
Divergent	=VLOOKUP(A4			
The Fall of Arthur	=VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])			

2. Table_Array

IF X ✓ f_x =VLOOKUP(A4,'Task 1 - LOOKUP Table'!\$A\$2:\$B\$33

BOOK NAME (Lookup Value)	Author	Shop	Stock Level	Rating	Price
Catching Fire	Suzanne Collins	Amazon	5	5*	£ 4
The Fall of Arthur	J. R. R. Tolkien	Powell's Books	4	5*	£ 6
Harry Potter And The Goblet Of Fire	J. K. Rowling	Virgin	0	4*	£ 4
Insurgent	Veronica Roth	Powell's Books	15	3*	£ 5
The Hunger Games	Suzanne Collins	Amazon	0	5*	£ 4
The Heroes of Olympus	Rick Riordan	Powell's Books	12	5*	£ 4
Harry Potter and the Sorcerer's Stone	J. K. Rowling	Books A Million	0	4*	£ 4
Allegiant	Veronica Roth	Amazon	4	5*	£ 6
The Fault in Our Stars	John Green	Amazon	0	3*	£ 4
Mockingjay	Suzanne Collins	abebooks	3	5*	£ 4

Lookup_Value

Output value

1) Select the **lookup value**. The **lookup value** will appear also in the **lookup table (table_array)**.

2) Select the **lookup table (table_array)**. This may be in the same sheet or another sheet. Select the **lookup value** and then the **output value**.

Make sure you **absolute** cell reference the **table_array**.

Vlookup

3. col_index_num

IF X ✓ fx =VLOOKUP(A4,'Task 1 - LOOKUP Table'!\$A\$2:\$B\$33,2)

	A	VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])
1	BOOK NAME (Lookup Value)	Author
2	Catching Fire	Suzanne Collins
3	The Fall of Arthur	J. R. R. Tolkien
4	Harry Potter And The Goblet Of Fire	J. K. Rowling
5	Insurgent	Veronica Roth

Column - 1

Column - 2

3) Select the **column** in the table for the **output value**.

In this example the author is in the **second column** of the **selected table** so therefore you would write **2**.

4. Range_Lookup

IF X ✓ fx =VLOOKUP(A4,'Task 1 - LOOKUP Table'!\$A\$2:\$B\$33,2,FALSE)

	A	VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])
1	BOOK NAME (Lookup Value)	
2	Catching Fire	
3	The Fall of Arthur	
4	Harry Potter And The Goblet Of Fire	

TRUE - Approximate match
FALSE - Exact match

VLOOKUP will only find an exact match

4) You need to select **false** which is an **exact match**. This means the **Vlookup** will **only find an exact match** for the **output value**.

Remember to close the brackets.

Plenary – Refer to the Lesson Objectives

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Understand the use of the Vlookup function

Understand the use of absolute cell referencing.

Understand the use of an nested if statement.

Understand the used of the different count functions.

Understand the use of the sumif function.

Plenary Task (Q&A)

Discuss the advantages of using the vlookup function.

Discuss the levels pupils have achieved for this task.