

Spreadsheets

If Statements Part 2

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Task Overview

Objectives

Understand the use of If statements including the logical, true and false statements.

Understand how calculations can be used as True statements

Understand the use of nested if statements including more than one true statement.

Extension: Understand the use of count and sum if functions.

Outcomes

Complete the If Statement Part 2 worksheets.

Time

If Statements with Calculations

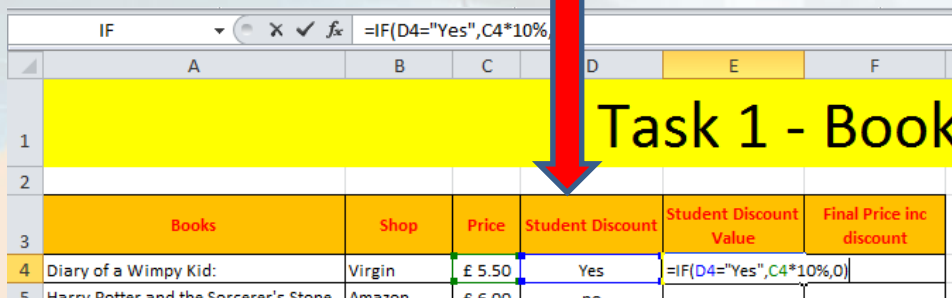
If student discount has been given (“**Yes**”) then for the **true statement** you have to calculate **10% of Price**. This will be the value for the **student discount**. If the student discount does not contain “**Yes**” than the **false value (0)** will be shown.

1. Logical Test

Does the Cell in D4 equal “**Yes**”

2. If the **Logical Test is true** then the calculation (**10% of the price**) will be shown.

3. If the statement is **false** then the false value (**0**) will be shown.



Books	Shop	Price	Student Discount	Student Discount Value	Final Price inc discount
Diary of a Wimpy Kid:	Virgin	£ 5.50	Yes	=IF(D4="Yes",C4*10%,0)	
Harry Potter and the Sorcerer's Stone	Amazon	£ 6.00	No		

=IF(D4="Yes",C4*10%,0)

1. Logical Test

2. True

3. False

Nested if Statements

A **nested if** will contain **more than one true statement**. In this example the delivery type will be either **A, B or Free**.

The **Nested if** will check the first logical Test. If the first test is false then it will check the next logical test. If both tests are false then the false value will be shown.

1. Logical Test 1
Does the Cell in C4 equal "A"

2. If the Logical Test 1 is true
then **3.50** will be printed.

3. Logical Test 2
Does the Cell in C4 equal "B"

2. If the Logical Test 2 is true
then **4.50** will be printed.

If both logical tests are false the false value (0) will be printed.

	A	B	C	D
1				
2				
3				
4	Once Upon A Time	Adventure	=IF(C4="a",3.50,IF(C4="b",4.50,0))	

=IF(C4="a",3.50,IF(C4="b",4.50,0))

1. Logical Test

2. True

1. Logical Test

2. True

3. False

Extension: Counts

=Count(Range) - This will count a range of cells which only includes numbers.

=CountA(Range, Criteria) - This will count a range of cells which includes letters and numbers. **The A stands for alphanumeric.**

=Countif(Range, Criteria) - This will count a range of cells which includes a specific criteria.

Not =Countif(Range, "<>Criteria") - This will count everything apart from the specific criteria.

		=CountA
12	Count All Books	=COUNTA(A4:A10)
13	Sales from Virgin	=COUNTIF(B4:B10,"virgin")
14	Sales from Amazon	=COUNTIF(B4:B10,A14)
15	Not HMV	=COUNTIF(B4:B10,"<>HMV")

**Not
Count**

=CountIF(Range, Criteria)

When you reference to a criteria you can either write the criteria in speech marks or reference to a cell that contains the criteria.

Extension: Sumif

Books	Shop	Price	Student Discount	Student Discount Value	Final Price inc discount
Diary of a Wimpy Kid:	Virgin	5.50	Yes	£ 0.55	£ 4.95
Harry Potter and the Sorcerer's Stone	Amazon	6.00	no	£ -	£ 6.00
The Heroes of Olympus	Virgin	4.50	Yes	£ 0.45	£ 4.05
The Hunger Games	Amazon	5.50	No	£ -	£ 5.50
The Maze Runner	HMV	6.50	Yes	£ 0.65	£ 5.85
The Book with No Pictures	Virgin	3.50	Yes	£ 0.35	£ 3.15
Mockingjay	Amazon	5.00	No	£ -	£ 5.00
Count All Books		7		Total	
Sales from Virgin		3		Highest	
Sales from Amazon		0		Lowest	
Not HMV		6		Average	
Sumif (Final Price)					
Sumup total Virgin Sales	=SUMIF(B4:B10,"virgin",F4:F10)				
Sumup total Amazon Sales					

Range: The criteria is "virgin". Look at the table and highlight the range of cells which includes "Virgin".

Criteria: You can either reference to a cell or write the criteria in quotation marks.

SumRange: This will sum up only the criteria values from the sum range.



A sumif will only **sum** (add) up a **specific criteria** (condition) from the **sum_range**.

Plenary – Refer to the Lesson Objectives

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Plenary Task (Q&A)

Discuss the levels pupils have achieved for this task.