Spreadsheets

Skills Lesson Part 2

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Skills Lesson Part 2 Overview

Objectives

To understand the use of the different count functions:
=Count
=CountA
=CountIF

To understand the need to use absolute cell referencing in some calculations.

Outcomes	Time
Pupils will complete the skills lesson Part 2 Excel sheet.	

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Overview – Count Function

=Count(Range)

This function will count the cells within the range that contain only numbers.

=CountA(Range)

This function will count the cells within the range which are not empty.

Numbers	
	1
	3
	1
	4
	4
	34

The Range

Count Numbers	

Mobile Brands	
	Apple
	Apple
	Samsung
	Sony
	Apple
	Blackberry
	Sony
	Apple
	Apple
	Samsung
	HTC
	Sony

The Range

Count All Phones	

Count Numbers	=COUNT(		Count All Phones	
	COUNT(**value1**, [value2], ...)			
Max				
Min			Samsung	

Count All Phones	=COUNTA(		Count All Bags	
Apple	COUNTA(**value1**, [value2], ...)			
Samsung			Marc Jacobs	

The count function will only Count the cells.
Do not get confused with Sum.

Overview – Count**if** Function

=Countif(Range,Criteria)

This function will count the cells which contains a specific criteria from the range

Example: We need to count the Prada bags from the range.

HandBags
MARC JACOBS
LOUIS VUITTON
MARC JACOBS
PRADA
MARC JACOBS
MARC JACOBS
HERMES
MARC JACOBS
FENDI
LOUIS VUITTON
MARC JACOBS
PRADA

The Range

Count All Bags	
Prada	
Marc Jacobs	
All bags apart from Marc Jacobs	

Some times you may have to count all cells apart from a certain criteria.

In this example you we want to count all the brands apart from Marc Jacobs

=countif(Range, "<>Marc Jacobs")

Prada	=COUNTIF(		TopShop
Marc Jacobs	COUNTIF(**range**, criteria)		

=Countif(Range,"Prada") or =Countif(Range,"I19")

Not: =Countif(Range,"<>criteria")

Overview – Count**if** Function

Cars Brands		
Nissan	PathFinder	2014
Toyota	land cruiser	2008
GMC	Yukon	2007
Mercedes	clclass	2014
Nissan	PathFinder	2009
Toyota	land cruiser	2008
GMC	Yukon	2013
Mercedes	clclass	2007
Toyota	land cruiser	2014
chevrolet	Captiva	2009
Nissan	PathFinder	2012
chevrolet	trailblazer	2013

The Range

=Count
=CountA
=Countif

Instructions:

In the cells shaded
the correct Count

Count All Cars		PathFinder		Year >=2012	
Toyota		Yukon		2014	
Nissan		land cruiser		<=2011	
All car Brands apart from Toyota		All car models apart from land cruiser		All car models apart from 2013	

Some times you may have to use the following to find a specific criteria:

< - less than

> - more than

= - equal to

=count**if**(range,”>=2012”)

Overview – Sum**if** Function

Task 3: Sumif (Part 1)

	Javeli					Count	
	Form	Gender	Year	Attempts		Male Pupils	
	11B Red	Male	1	5		Female Pupils	
	10G Red	Female	10	3		All Pupils	
	11B Red	Male	1	5		11B Red	
	12B Red	Male	1	3			
	10G Purple	Female	1	5			
	12G Purple	Female	1	3		Sumif	
	11B Red	Male	1	5		Male Attempts	=SUMIF(
		Total				SUMIF(**range**, criteria, [sum_
		Highest				

Range

Sum Range

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

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

SumRange: This will basically

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

Example:The sumif will only add up the male attempts from the **sum_range**.

Absolute Cell Referencing

When you use **AutoFill** to **duplicate a formula** into the cells **below** then you must use **absolute cell referencing** if you want the cells to be **referencing** to **one particular cell**.

Absolute cell referencing will **lock** in a particular cell. To absolute cell reference you must insert a **dollar sign before Letter and number of the cell.**

=B6*E3

In the example to the left if you do not use **absolute cell referencing** on the **25%** then the Price will be multiplied against the content in **E4.**

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Graphs

- Highlight the cells that will be required to create the chart.
- Select the a chart option (Bar, Pie, line etc.)
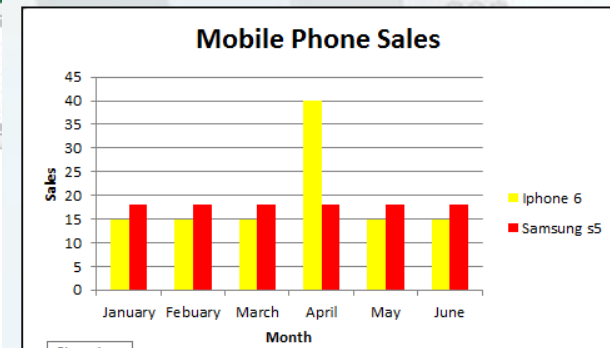- You can add labels to your graph by selecting Layout 9 from the Quick Layout menu.

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Plenary – Refer to the Lesson Objectives

Objectives

To understand the use of the different count functions:

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Plenary Task (Q&A)

1. What is the main advantage of using the Count function in completing this task on a spreadsheet.