

Computing

Lesson 4: Becoming a Data Master

Spreadsheets

Halima Bhayat

Materials from the Teach Computing Curriculum created by the National Centre for Computing Education



Example of a SUM function

SUM can be used to quickly add lots of numbers together in a row or column.

=SUM(D4:D11)

- Notice at the top the formula bar shows your formula.

fx	=sum(D4:D11)				
	A	B	C	D	
1					
2					
3					
4				1	2
5				2	2
6				3	2
7				4	2
8				1	3
9				2	3
10				3	3
11				4	3
12		TOTAL (SUM)		=sum(D4:D11)	

Credit: Google Sheets screenshot: Halima Bhayat



Example of a MAX

A MAX formula works out the largest value from those you select.

=MAX(D4:D11)

fx	=MAX(D4:D11)			
	A	B	C	D
1				
2				
3				
4				1
5				2
6				3
7				4
8				1
9				2
10				3
11				4
12		MAX		? =MAX(D4:D11)
13				

Credit: Google Sheets screenshot: Halima Bhayat



Example of a MIN

A MIN formula works out the smallest value from those you select.

```
=MIN(D4:D11)
```

fx	=MIN(D4:D11)				
	A	B	C	D	
1					
2					
3					
4				1	2
5				2	2
6				3	2
7				4	2
8				1	3
9				2	3
10				3	3
11				4	3
12		MIN		? =MIN(D4:D11)	

Credit: Google Sheets screenshot: Halima Bhayat



Example of a COUNTA

A COUNTA formula works out the non blank values in a cell.

=COUNTA(D4:D11)

fx =COUNTA(D4:D11)					
	A	B	C	D	
1					
2					
3					
4				1	2
5				2	2
6				3	2
7				4	2
8				1	3
9				2	3
10				3	3
11				4	3
12		COUNTA		=COUNTA(D4:D11)	
13					

Credit: Google Sheets screenshot: Halima Bhayat



Task 1 Analysing a cake recipe

	A	B	C	D	E	F	G	H	I	J	K	L
1	Ingredient	Measurements	Quantity	Two times	Three times	Half (divide by two)	Ingredient	Measurements	Quantity	Two times	Three times	Half (divide by two)
2	Chocolate chip muffins						Cupcakes					
3	Eggs		2	4	6	1	Self-raising flour	g	125	250	375	62.5
4	Vegetable oil	ml	125	250	375	62.5	Margarine	g	125	250	375	62.5
5	Semi-skimmed milk	ml	250	500	750	125	Caster sugar	g	125	250	375	62.5
6	Caster sugar	g	250	500	750	125	Eggs		2	4	6	1
7	Flour	g	400	800	1200	200	Butter	g	125	250	375	62.5
8	Baking powder	tsp	3	6	9	1.5	Icing sugar	g	225	450	675	112.5
9	Salt	tsp	1	2	3	0.5		TOTAL (SUM)				
10	Chocolate chips	g	100	200	300	50		MAX				
11			COUNTA					MIN				
12	Blueberry muffins						Dairy-free chocolate cupcakes					
13	Flour	g	275	550	825	137.5	Self-raising flour	g	150	300	450	75
14	Baking powder	tsp	2	4			Cocoa powder	g	30	60	90	15
15	Caster sugar	g	125	250			Caster sugar	g	175	350	525	87.5
16	Butter, melted	g	75	150			Dairy-free marg	g	175	350	525	87.5
17	Eggs, beaten		2	4			Eggs		3	6	9	1.5
18	Milk	ml	300	600			Vanilla extract	tsp	0.33	0.66	0.99	0.165
19	Blueberries	g	125	250			Dairy-free dark	g	75	150	225	37.5
20			TOTAL (SUM)					MAX				
21			COUNTA					MIN				
22												

Credit: Google Sheets screenshot: Halima Bhayat



Analysing a cake recipe

- Open your cake recipes spreadsheet from Lesson 2.
- Viewing the spreadsheet image provided make use of a SUM, COUNTA, MIN and MAX functions. The cells that need to make use of the function have been colour coordinated.
- **SUM** - Green
- **COUNTA** - Yellow
- **MIN** - Blue
- **MAX** - Orange



Source: Pixabay



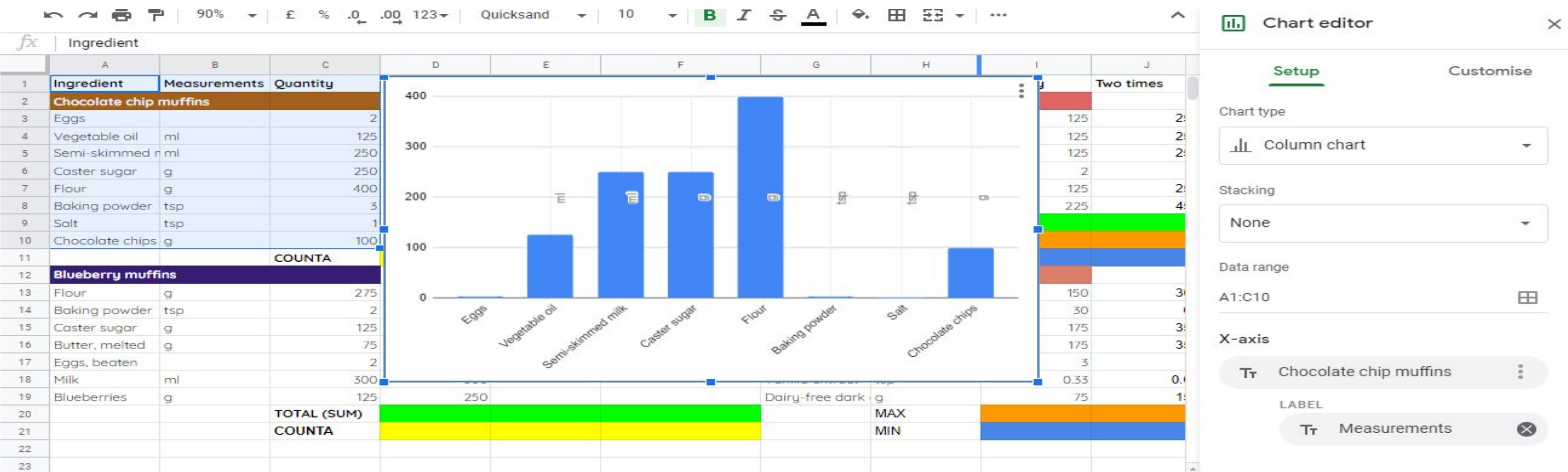
Pause the video to complete your task



Resume once you're finished



Task 2 Creating a Chart

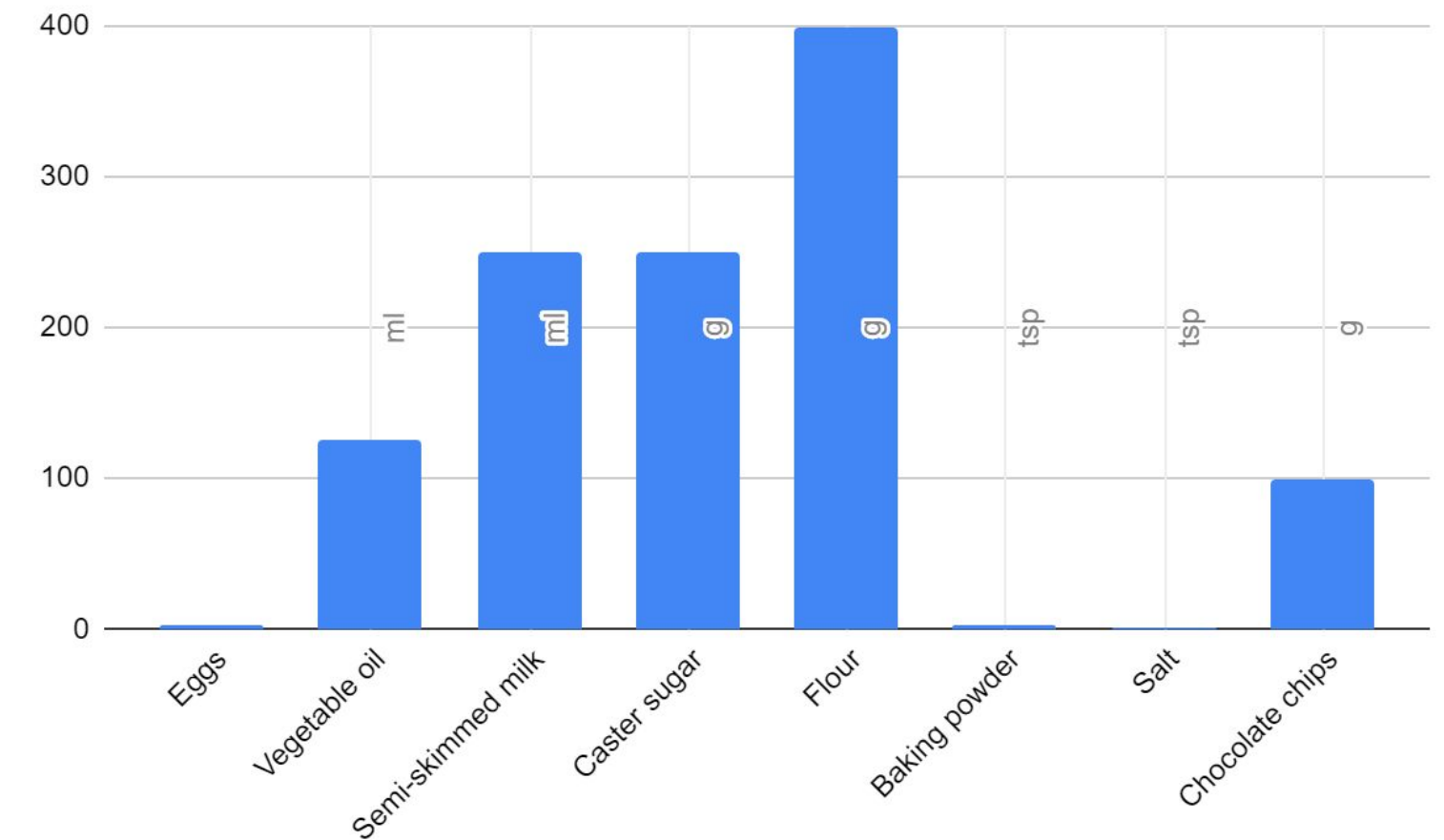


Credit: Google Sheets screenshot: Halima Bhayat



Creating a Chart

- Highlight one cake recipe of your choice as seen in the spreadsheet image provided.
- You only need need to highlight the measurements and Quantities.
- Go to Inset chart and select a bar chart.
- By using the customise tool you can change the way the chart looks.
- Which ingredient has the highest quantity?



Credit: Google Sheets screenshot: Halima Bhayat



Pause the video to complete your task



Resume once you're finished

