



# Charting Yucky Data



When we accumulate data, even icky data, as the numbers get bigger, patterns in our data become clearer and more accurate. In today's project, we will create graphs representing icky flavors for a new candy called YUCK! This may not sound good to high school students. It is a product targeted to "tweenages" – that awkward age when we are too old to enjoy for Ronald McDonald, but too young for the car keys.

Please carefully check that you completed the spreadsheet you see on the right entering the formulas/ functions exactly as shown (you may have this done already). By default, all **cell references** are **relative references**. When copied across multiple **cells**, they change based on the **relative** position of rows and columns. For example, if you copy the formula  $=A1+B1$  from row 1 to row 2, the formula will become  $=A2+B2$ .

When you use a cell reference with a letter and number (i.e B3), when that address is used in a formula or function and is copied or filled, MS Excel adjusts the cell address – this is a **RELATIVE** cell address. Using dollar signs (i.e. B3/\$B\$9) is an **ABSOLUTE CELL ADDRESS** and it will not change when it is filled or copied.

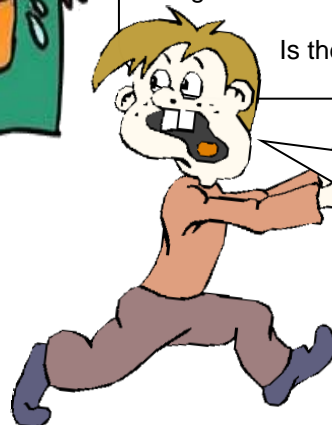
	A	B	C	D	E
1	YUCK! Candy Analysis				
2	Color of M & M	YUCK! Bag #1	YUCK! Bag #2	YUCK! Bag #3	Total of 3 YUCK! Bags
3	Dead Fish	5	5	3	=SUM(B3:D3)
4	Spoiled Milk	3	4	5	=SUM(B4:D4)
5	Stinky Socks	4	4	5	=SUM(B5:D5)
6	Rotten Eggs	5	6	6	=SUM(B6:D6)
7	Canned Pet Food	6	4	4	=SUM(B7:D7)
8	Mouldy Cheese	3	2	3	=SUM(B8:D8)
9	Totals	=SUM(B3:B8)	=SUM(C3:C8)	=SUM(D3:D8)	=SUM(E3:E8)
10					
11	Percent of Each Bag	% Bag 1	% Bag 2	% Bag 3	% of ALL 3 Bags
12	Dead Fish	=B3/\$B\$9	=C3/\$C\$9	=D3/\$D\$9	=E3/\$E\$9
13	Spoiled Milk	=B4/\$B\$9	=C4/\$C\$9	=D4/\$D\$9	=E4/\$E\$9
14	Stinky Socks	=B5/\$B\$9	=C5/\$C\$9	=D5/\$D\$9	=E5/\$E\$9
15	Rotten Eggs	=B6/\$B\$9	=C6/\$C\$9	=D6/\$D\$9	=E6/\$E\$9
16	Canned Pet Food	=B7/\$B\$9	=C7/\$C\$9	=D7/\$D\$9	=E7/\$E\$9
17	Mouldy Cheese	=B8/\$B\$9	=C8/\$C\$9	=D8/\$D\$9	=E8/\$E\$9
18	Total	=SUM(B12:B17)	=SUM(C12:C17)	=SUM(D12:D17)	=SUM(E12:E17)



It looks like each small bag of YUCK! contains about 25 pieces of icky candy. Some bags have more and some have less.

Let's compare graphs of 3 individual bags and this awful stuff and then the content of all icky bags of YUCK!

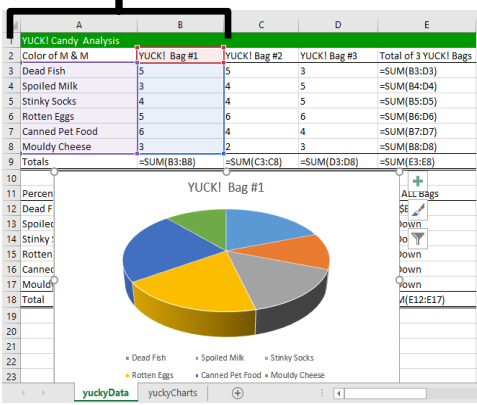
Is the gross-fun evenly distributed?



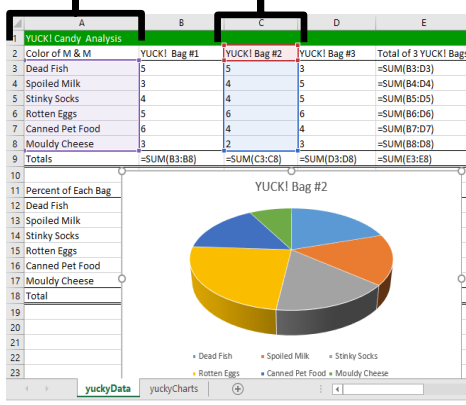
Apply the PERCENTAGE format across the range B12:E18 as shown in the graphic above.

It looks like she's gonna be sick – better hurry and GET OUTTA HERE!

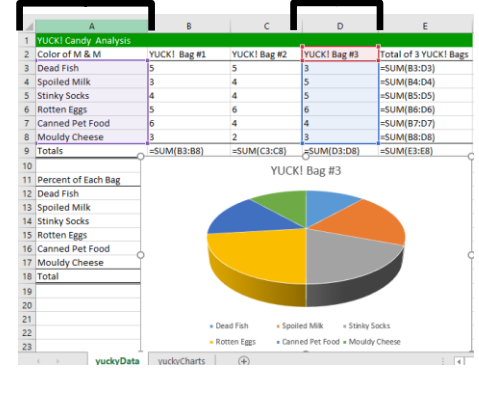
Highlight these columns for BAG #1 CHART



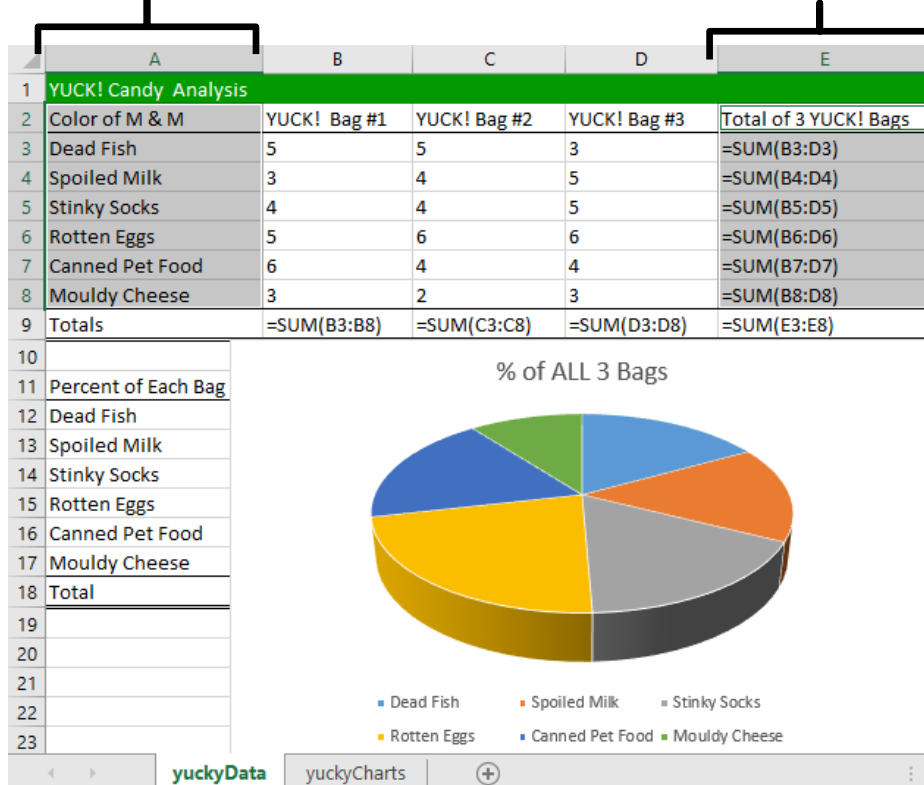
Highlight these columns for BAG #2 CHART



Highlight these columns for BAG #3 CHART



Highlight these columns for ALL-BAGS



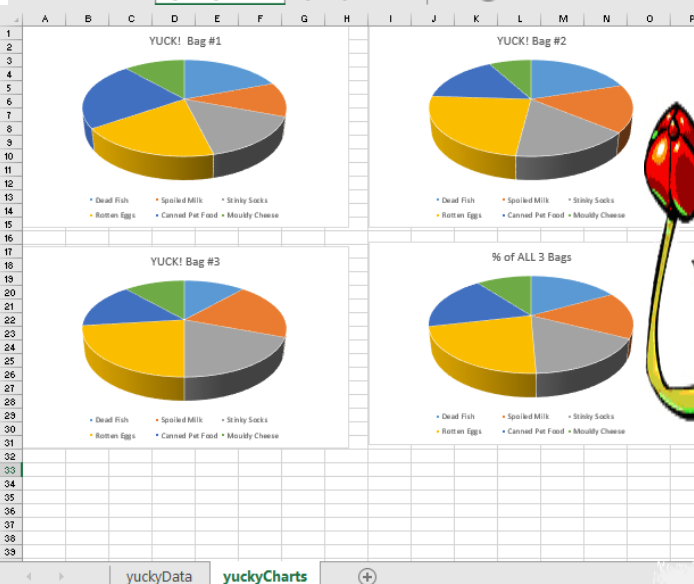
Highlight these 2 columns for Chart 1. Be sure to highlight A2:A8 and then hold the CNTRL key to highlight a non-adjacent column you need to include in your chart



Creating charts in MS Excel is EASY if you carefully set up your data tables. Sometimes, we want to chart data from a worksheet that is not contiguous (cells touch each other). We need to highlight different ranges of cells then,

Do this by highlighting your first range of cells. Highlight additional ranges of cells, as shown here, by holding the CTRL key and then highlighting the next range of cells you need.

Then choose your chart type under the INSERT tab, editing the title and labels as needed. **Insert each chart on your first data sheet & then cut and paste it to a second worksheet named CHARTS as shown.**



AMAZING!  
But it's still icky candy

