

Dos and Don'ts for Making Good Charts



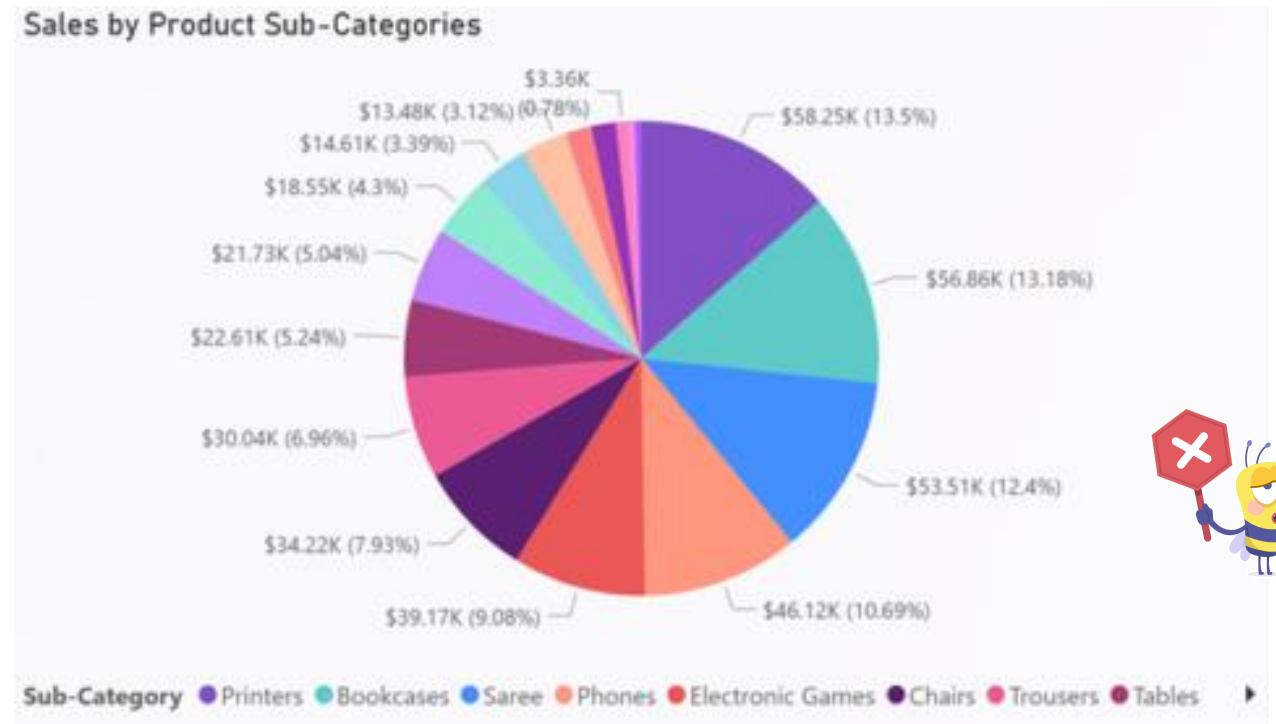
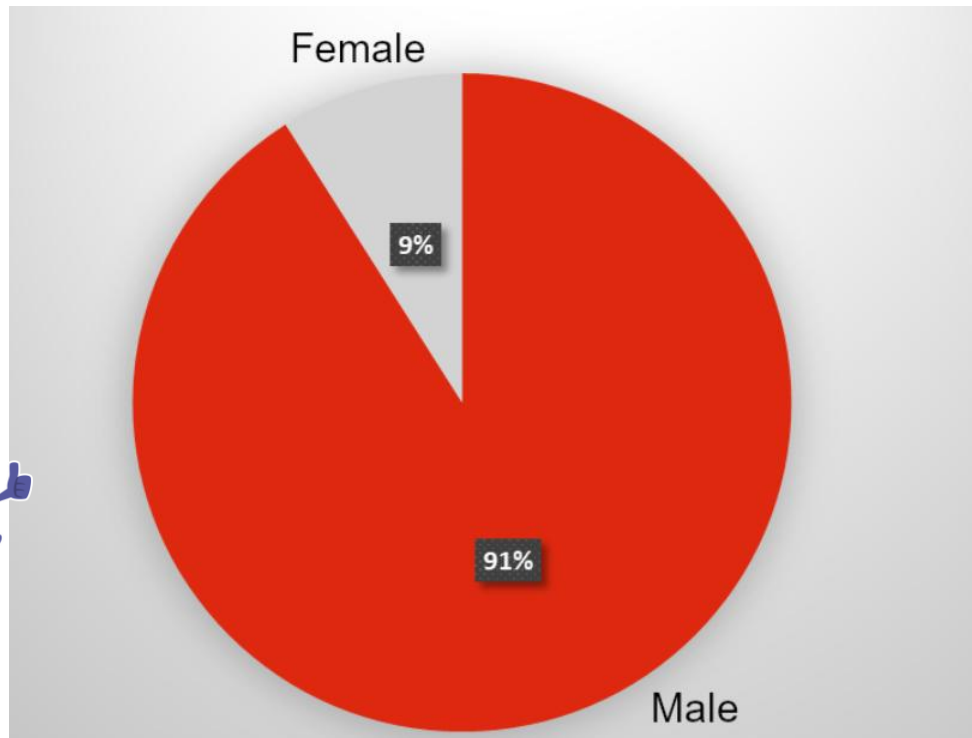
Ten considerations when designing a graph

<https://www.youtube.com/watch?v=6uNg-E5Lhyo>

Pie Charts

Don't use a pie chart with more than 5 categories.

Outside of this course, **consider using a bar chart instead** of a pie chart.



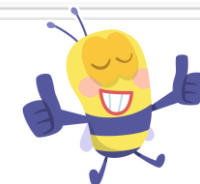
Background color

Use **white background color** for individual charts. When we start making dashboards you can be more creative. However, Tableau can be a little annoying about dashboard styling.

Red and Green

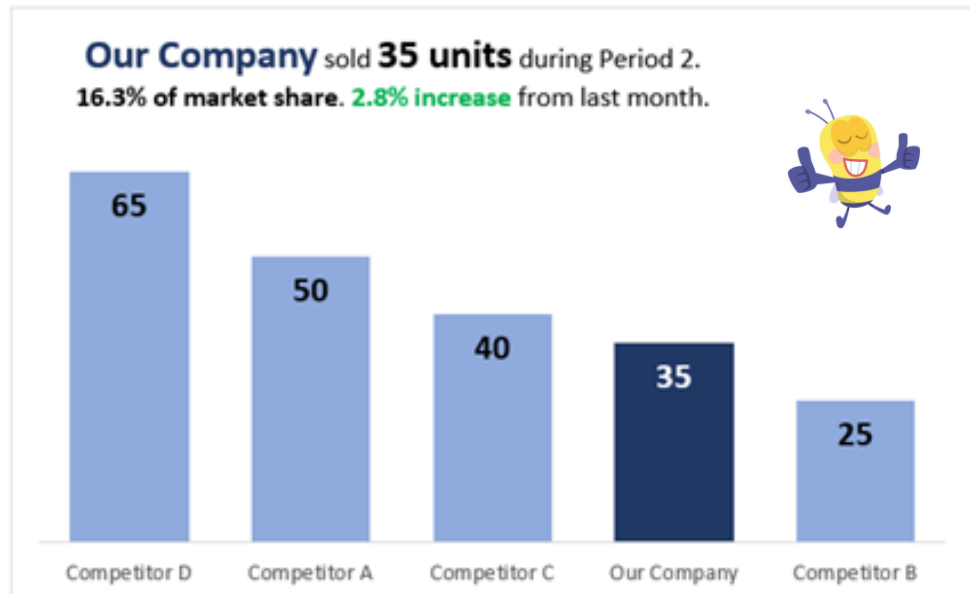
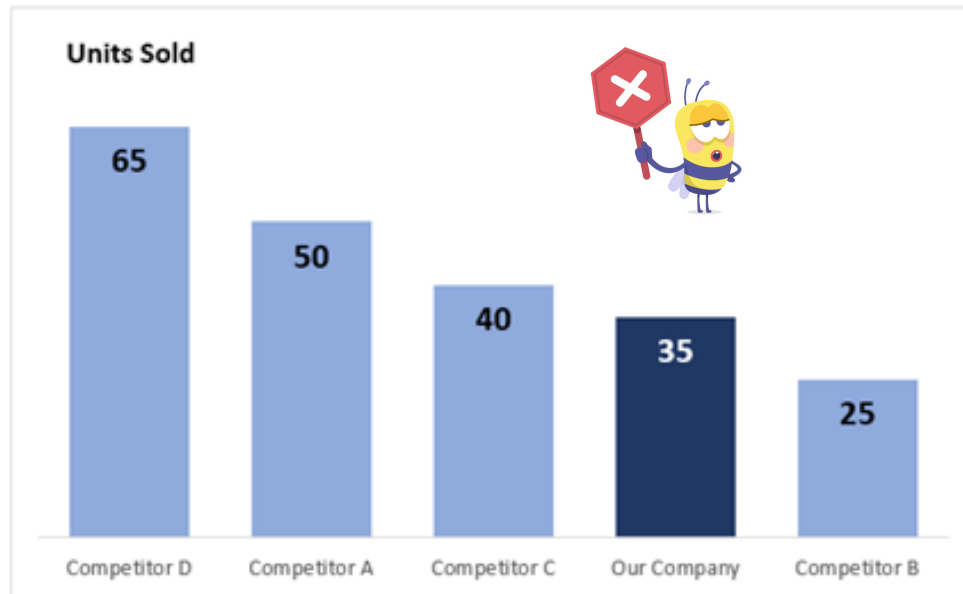
When using green to imply “good” and red to imply “bad” **provide additional cues.**

Category	Order Date			
	2011	2012	2013	2014
Furniture		▲ 8.48%	▲ 16.65%	▲ 8.29%
Office Supplies		▼ -9.58%	▲ 33.72%	▲ 34.34%
Technology		▼ -7.13%	▲ 38.87%	▲ 20.34%



Always have a title on your chart and try to avoid generic titles

The title should be about the data and the message it sends. Ideally your title **explains the point you are making** with the chart.



Cool titles

- Create a bar chart to show the number of calories for each type of drink.

Starbucks Calorific Sips That Make Your Diet Weep

- Create a grouped bar chart to show the carbs and protein for each drink.

Sip Smart: Are Carbs Taking Over Your Coffee?

- Create a stacked bar chart to show the fat and protein for each drink.

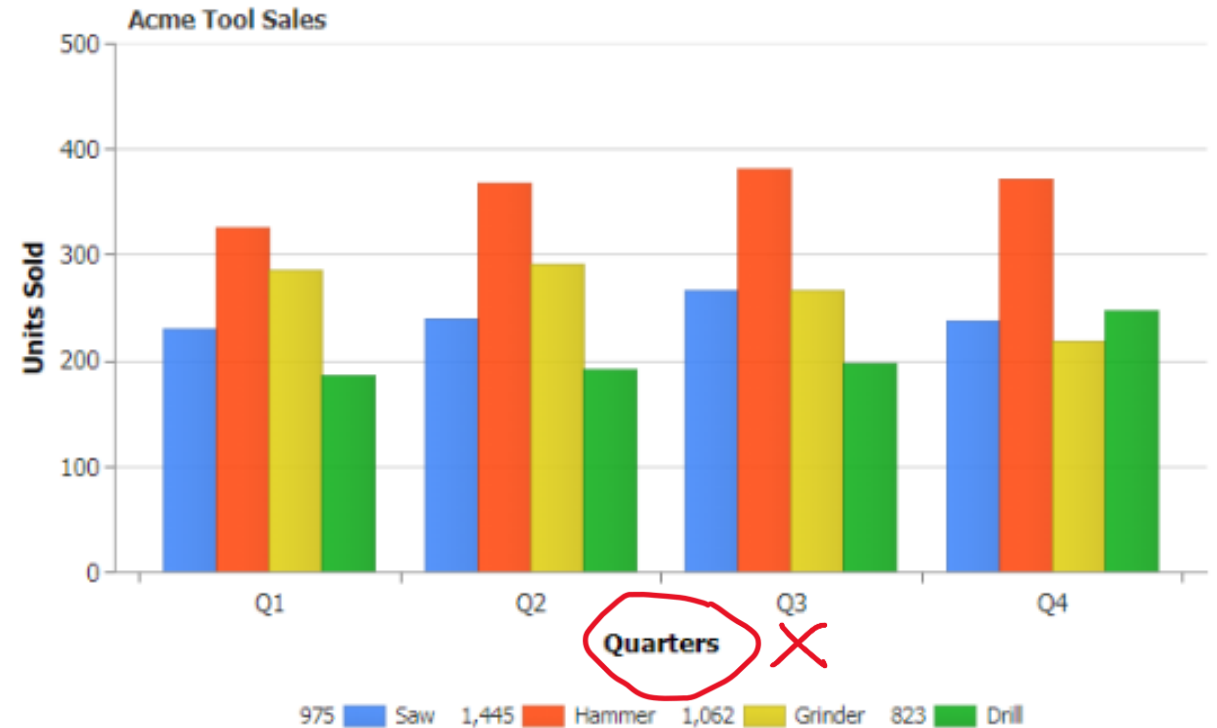
Sip Smart: Protein vs. Fat in Your Favorite Drinks

- Create a chart that will help you understand if there is a relationship between the calories and the carbs.

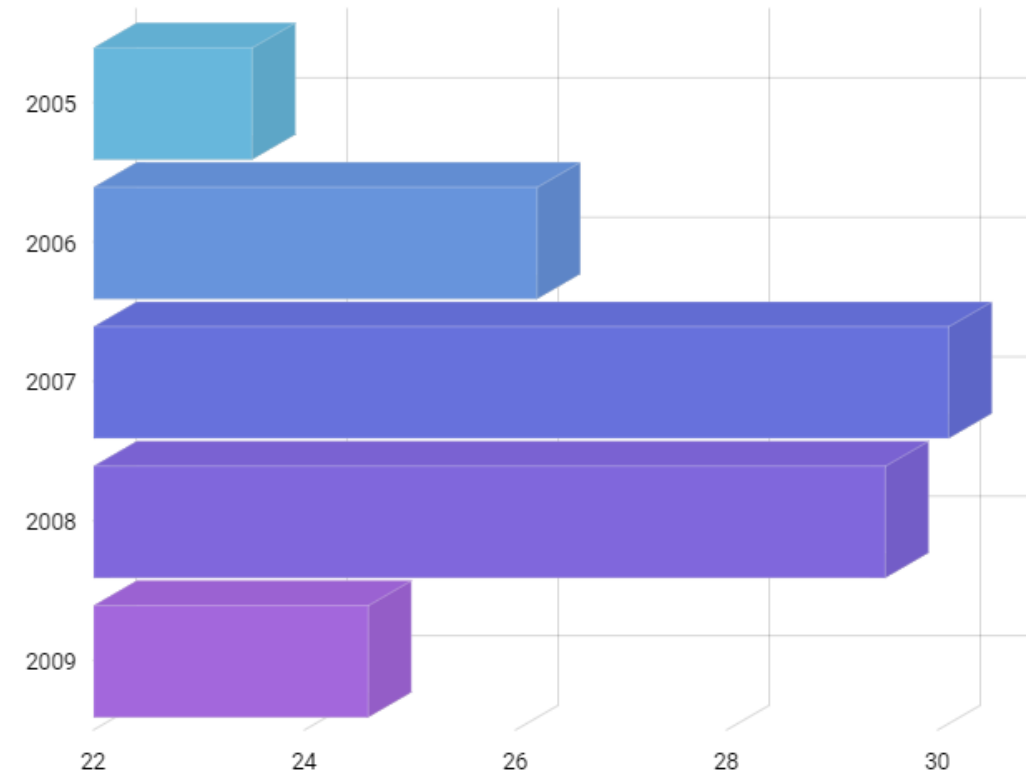
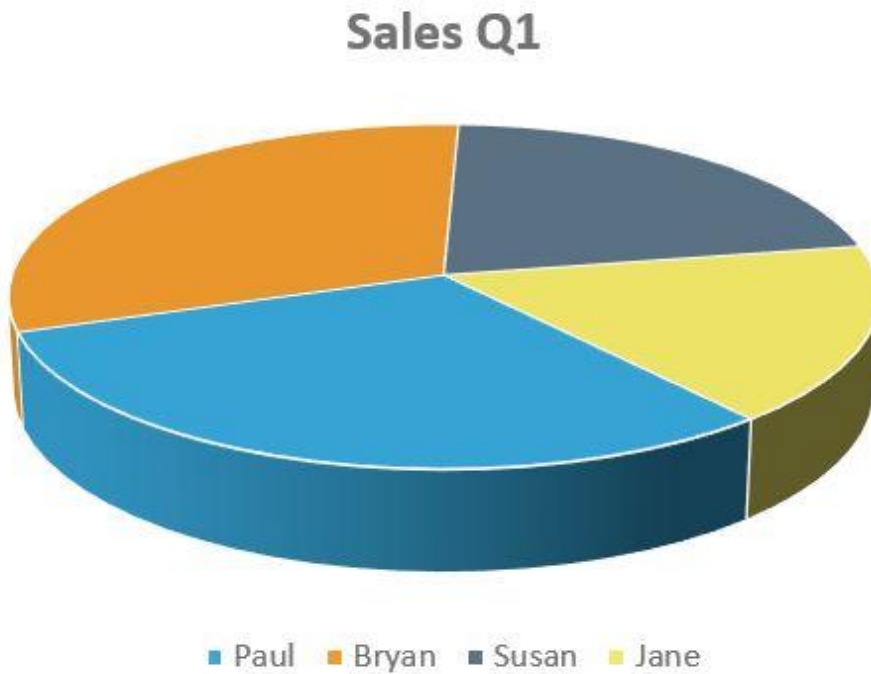
Rising Together: The Calorie-Carb Correlation in Coffee

Axes and tick labels

- **Categories and dates** often don't need further explanation, and **we can omit the axis label**.
- **Numeric axes should have a label**, and it should be clear in what unit the numbers are shown.



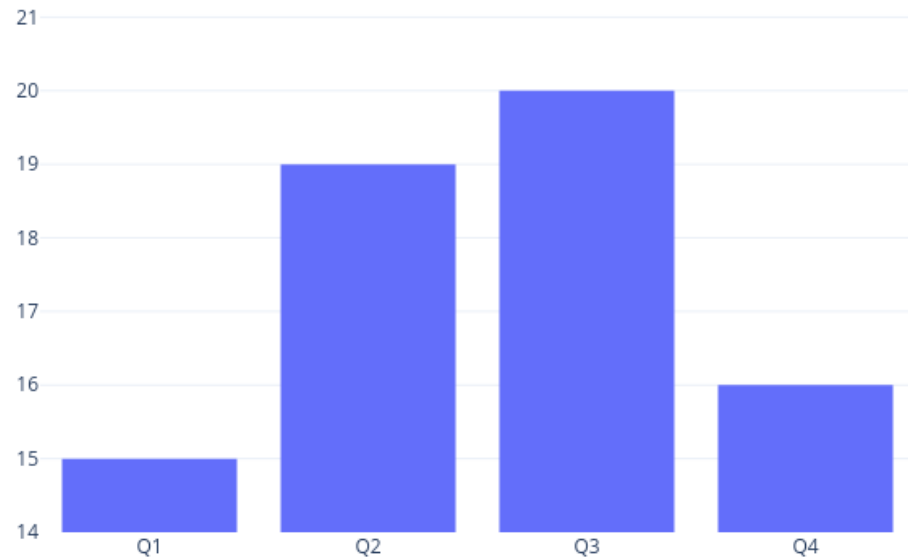
Don't use 3D shapes



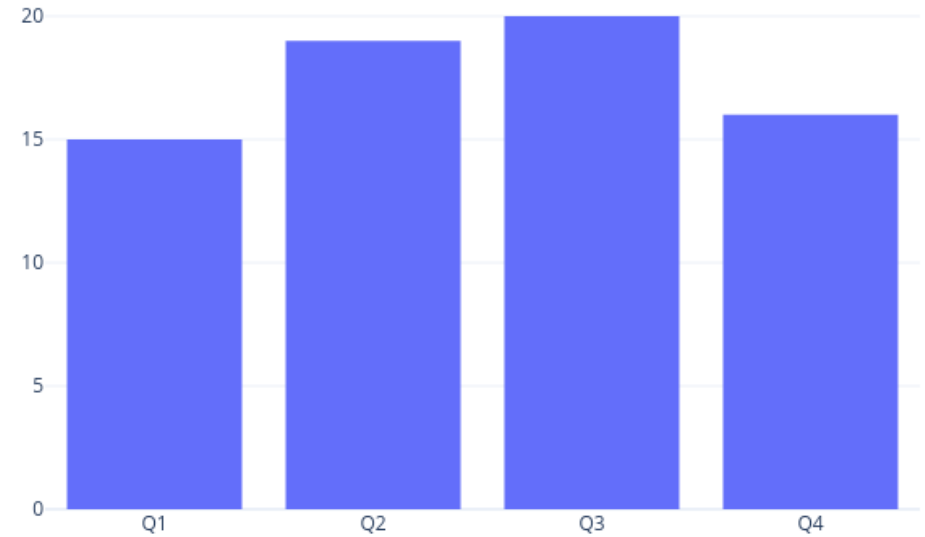
New rule

When making a bar chart always start the numeric axis at 0

Sales per Quarter



Sales per Quarter



EARLY APPROVAL RATINGS

SOURCE: CNN/ORC POLL | CNN/USA TODAY/GALLUP | GALLUP
SAMPLING ERROR: +/-3% PTS



OBAMACARE ENROLLMENT

6,000,000

AS OF
MARCH 27

7,066,000

MARCH 31
GOAL

SOURCE: HHS

mediamatters.org

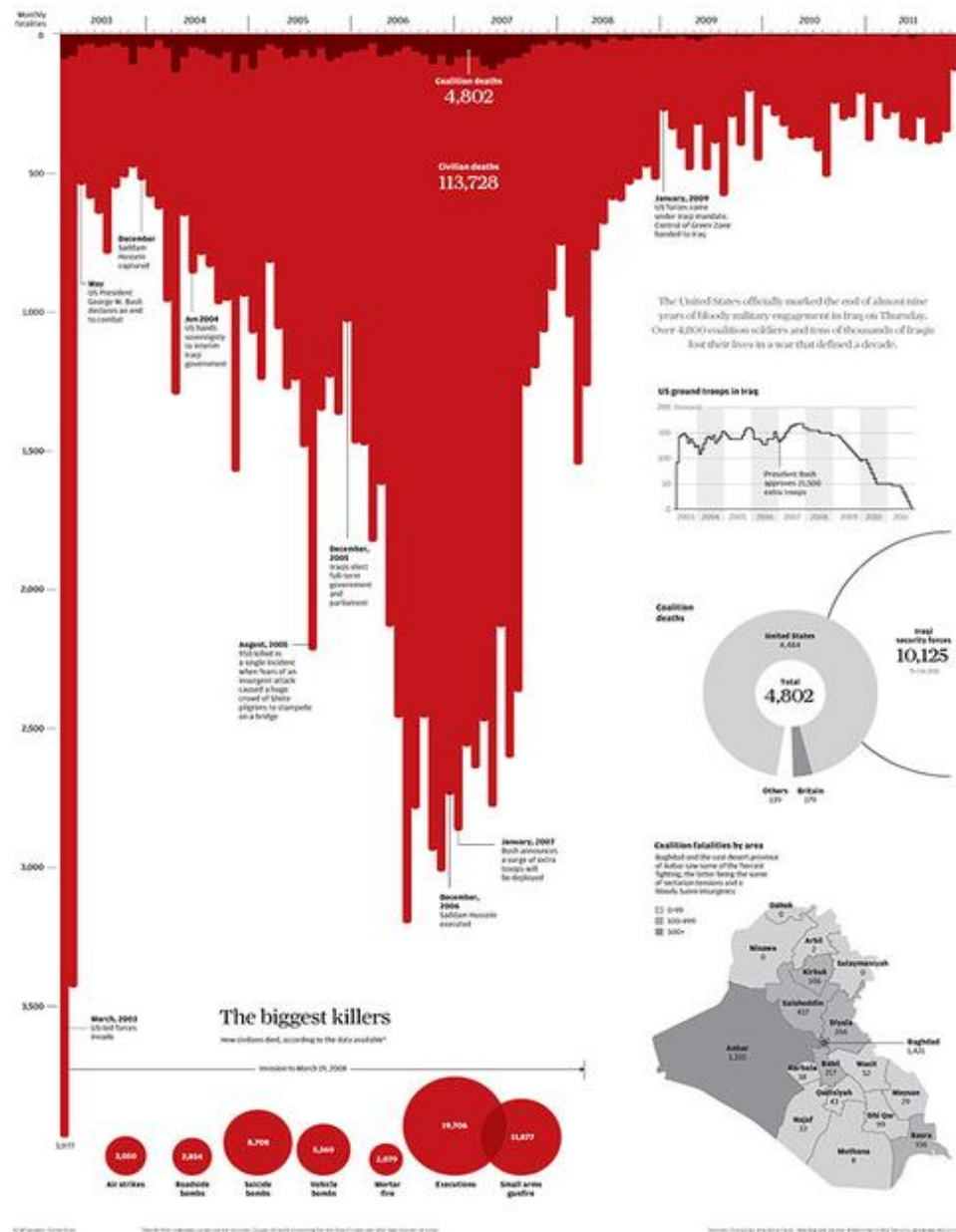
IE IN SECOND PLACE WITH \$26.5 MIL, WHILE "MUPP DOW FUT 16,325.00

Only bar charts must start at 0

With bar chart we are comparing the size (height) of the bars. With other types of charts such as scatter plots or line charts, we are comparing positions, so such charts are not required to start the numeric axis at 0. For scatter and line plots **you are expected to adjust the axis range to optimize the use of white space** on the plot.

In summary, don't underestimate the impact your styling choices have.

Iraq's bloody toll



Iraq: Deaths on the decline

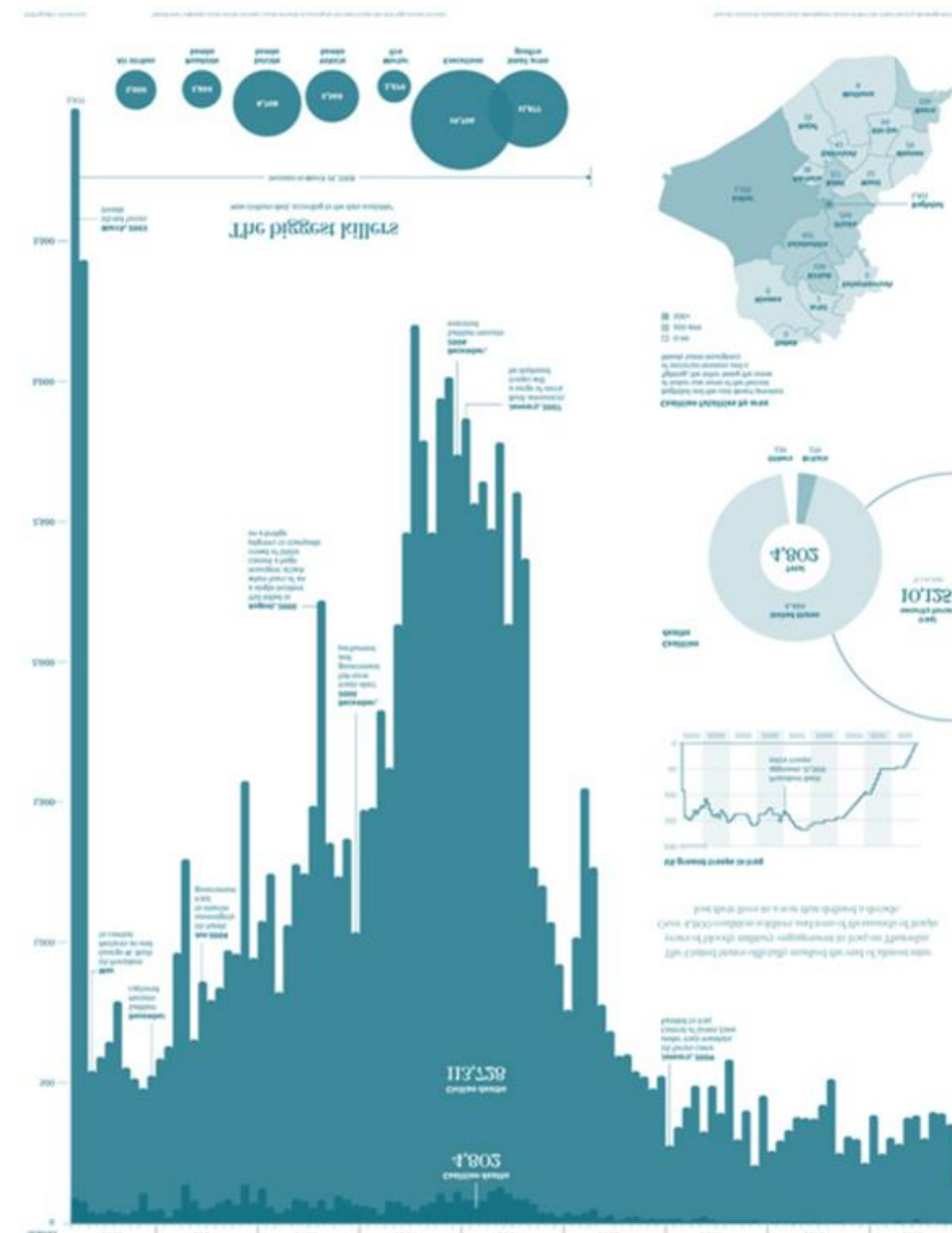


Chart Checklist

You will be expected to go over the chart checklist for every chart you make in this class. A Word version is available on Canvas.

Do not submit your charts until you have checked all of the following:

- All charts have titles that describe the data.
- All worksheets have names that clearly indicate which part of the assignment is shown on the worksheet.
- There is no unreadable text on the charts.
- The font and capitalization on all charts are consistent.
- I considered the axes, including ticks, ranges, and labels, of all charts.
- I removed axes labels when the categories were obvious and didn't need a common label.
- I considered all legend/colorbar titles.
- I chose custom colors for all the charts.
- I checked all the tooltips and made appropriate changes (not applicable to assignment 1).
- I submitted all my screenshot(s) (if required).
- I submitted a .twbx file (not a .twb file).
- I downloaded the .twbx file and opened it in Tableau to make sure it is the correct file.