

Styling

Positioning, drawing attention, using text, decluttering

Videos to watch

- Declutter - <https://www.youtube.com/watch?v=X79o46W5pII>
- Contrast - <https://www.youtube.com/watch?v=60KiAXbkrl0>

Guide the audience

Provide a visual hierarchy of information that will help make it clear to the audience how they should interact with the graph.

Ways to achieve that

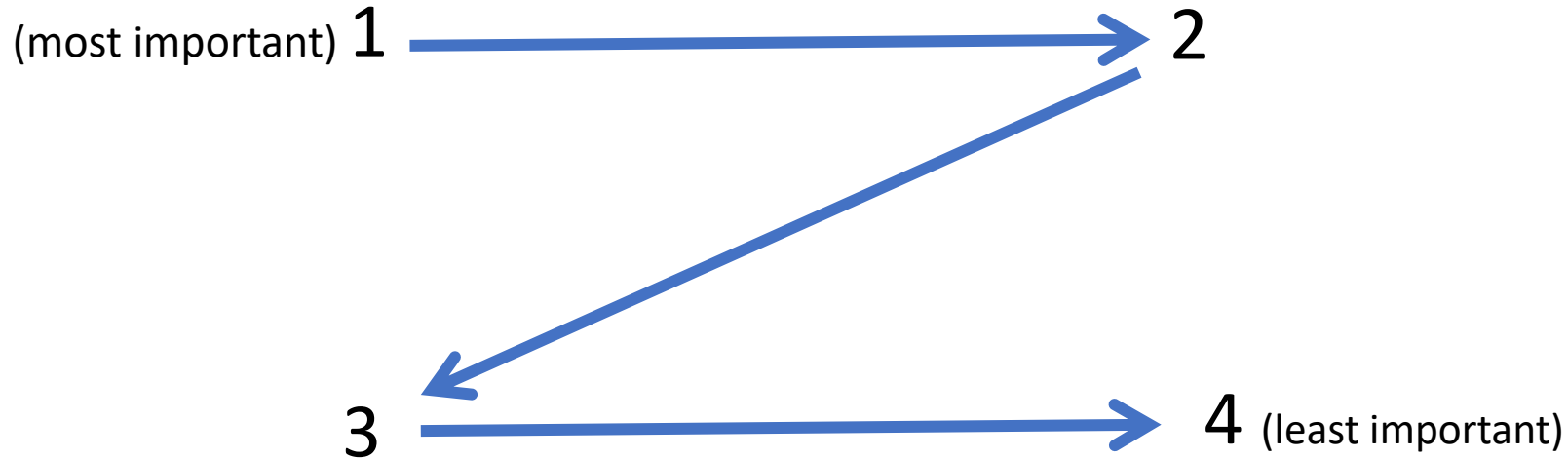
- Position on the page
- Grouping similar items (making them look similar or closer together)
- Making different items pop (stand out)
 - Color
 - Size
- Text
- Declutter

Position on a page

- If you don't have something that immediately stands out on the plot, put the important stuff in the top-left corner, so people see that first.
- Example: Title and explanation of the chart should be on the top left. Other text should be close to the element it refers to.

We zig-zag on a page

Try to place the information in a way that will come naturally to the viewer. This is usually top to bottom and left to right.



Natural order of things

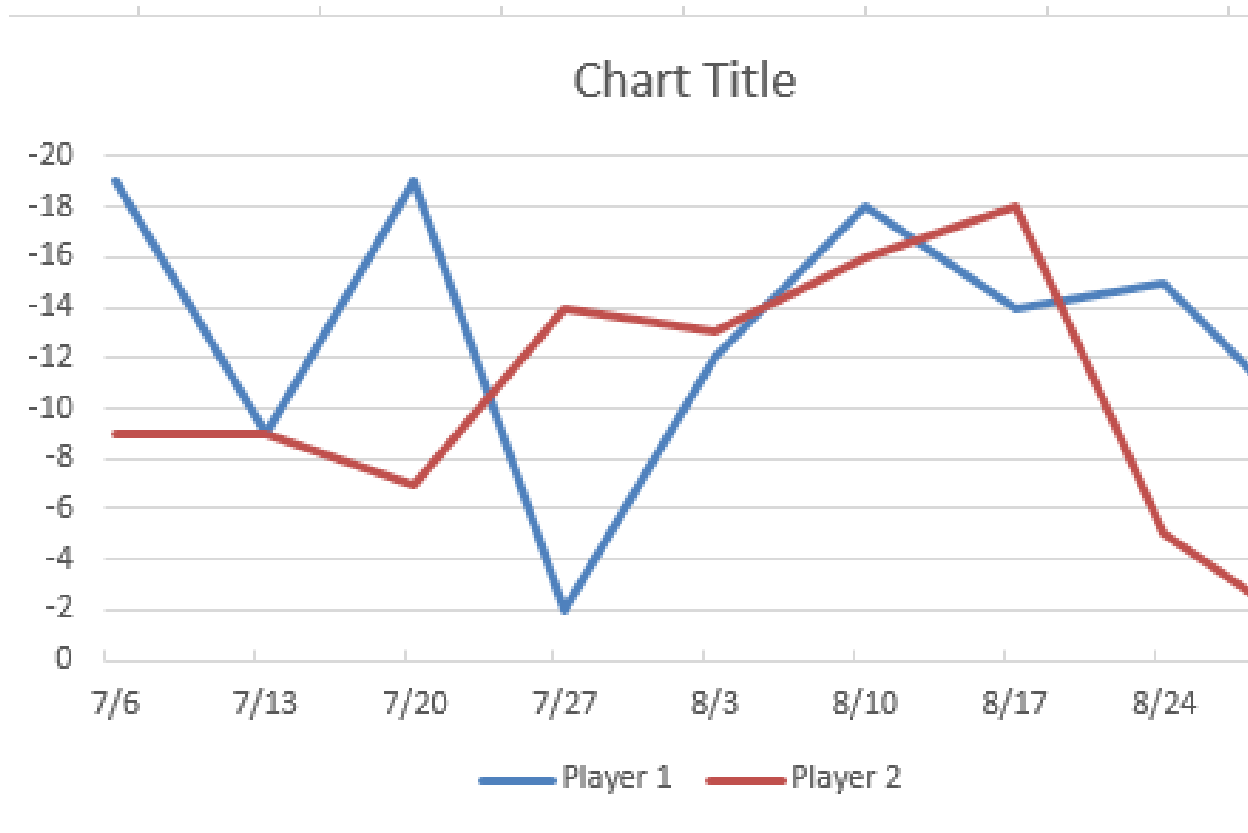
Along the axes use ordering that people expect to see.

Order your data in a way that comes naturally:

- Years, dates, months, seasons, quarters
- Alphabetic order
- Numeric order

For example:

Negative numbers should be on the left or on the bottom while positive should be on the right or on top.

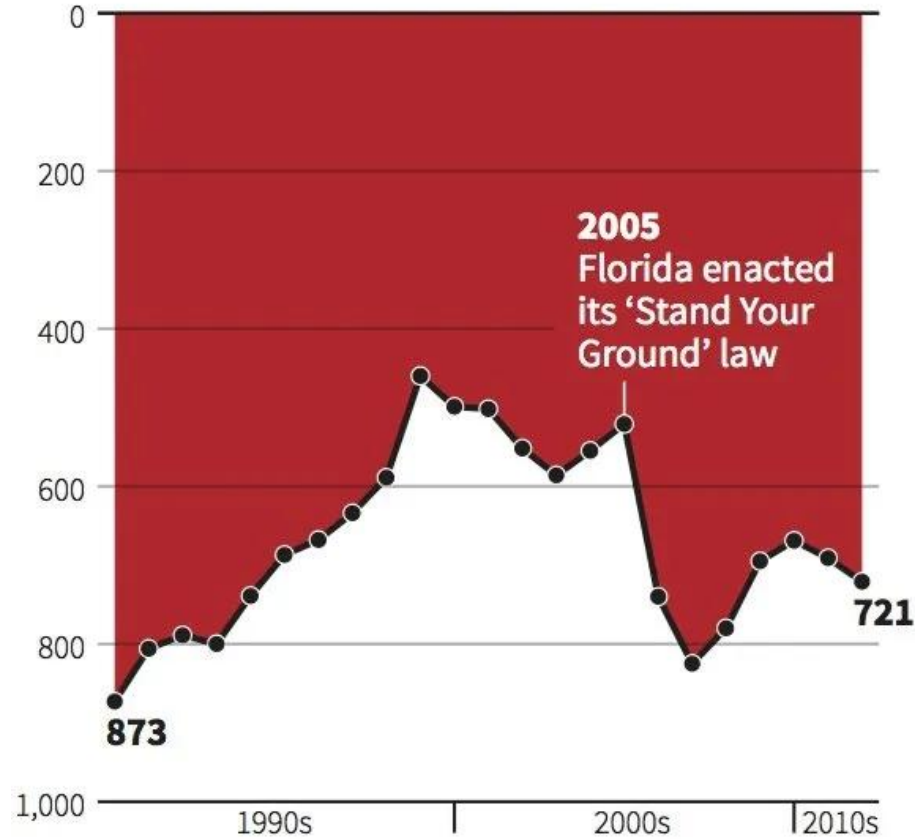


What do you think about this one?



Gun deaths in Florida

Number of murders committed using firearms



Source: Florida Department of Law Enforcement



Make things stand out when you want
the audience to focus on them

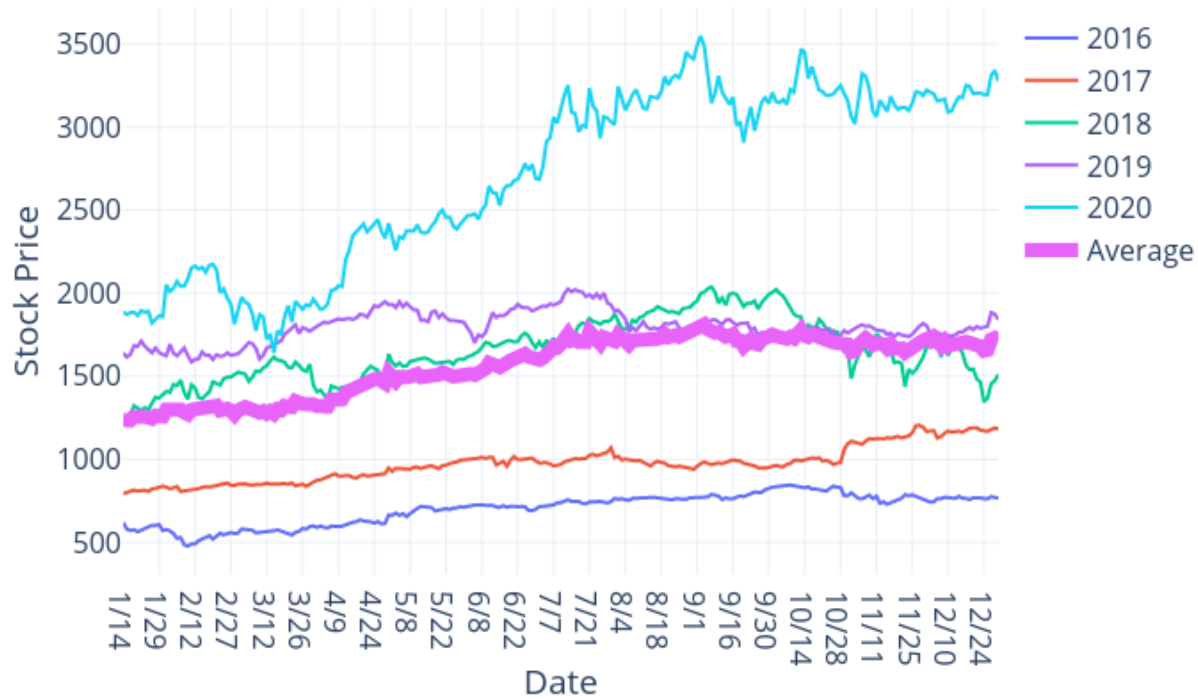
Emphasize with size



Use size to
make
something
stand out

- Relative size = relative importance
- Use the same size for items that are of the same importance.
- Use bigger size to draw attention to more important things.

Amazon Stock Price Over the last 5 years

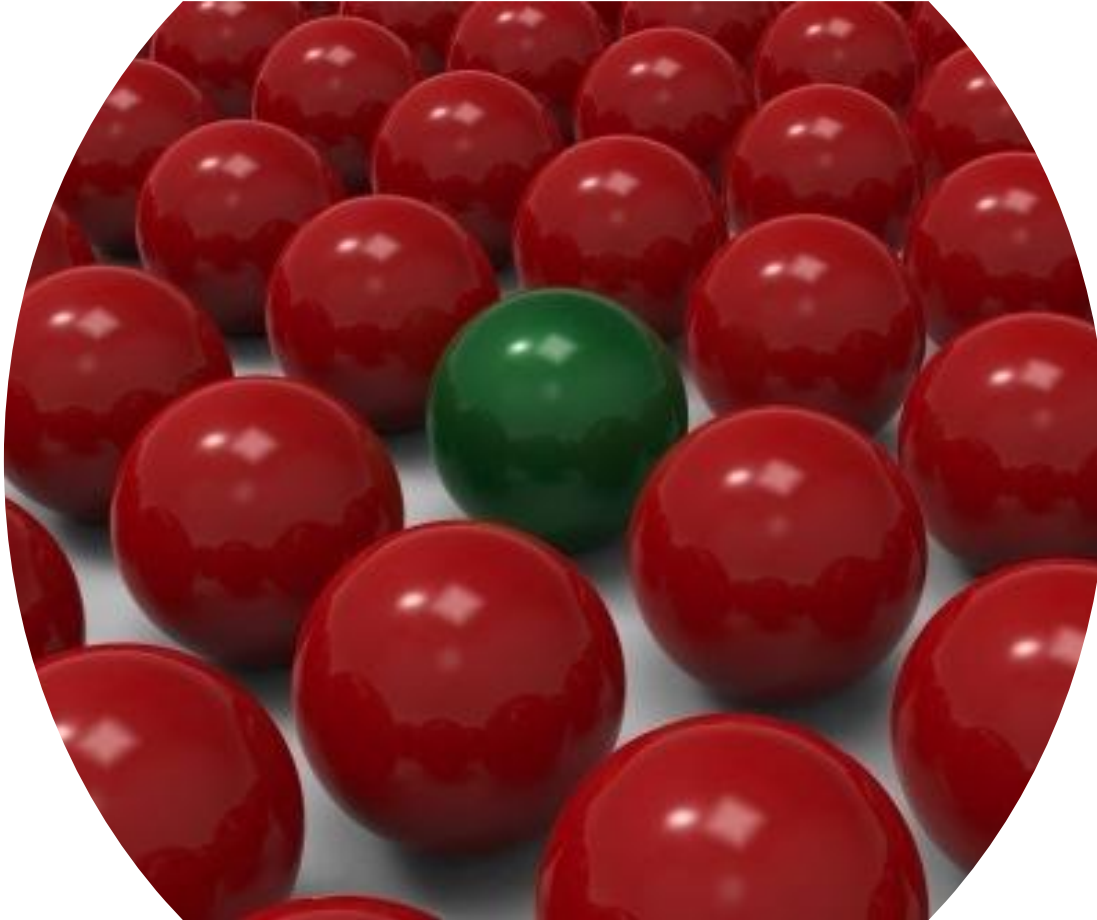


Which line shows the average?

What do you think about the stock price plot on the previous slide?

- Does the average stock price stand out?
- What do you think about the colors?
- What would you change about the plot in terms of color but also based on our previous discussions?

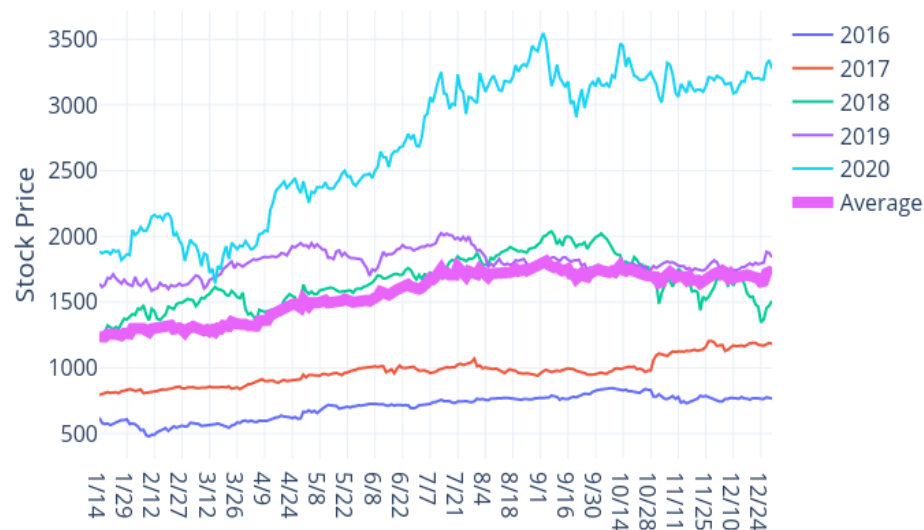
Emphasize with color



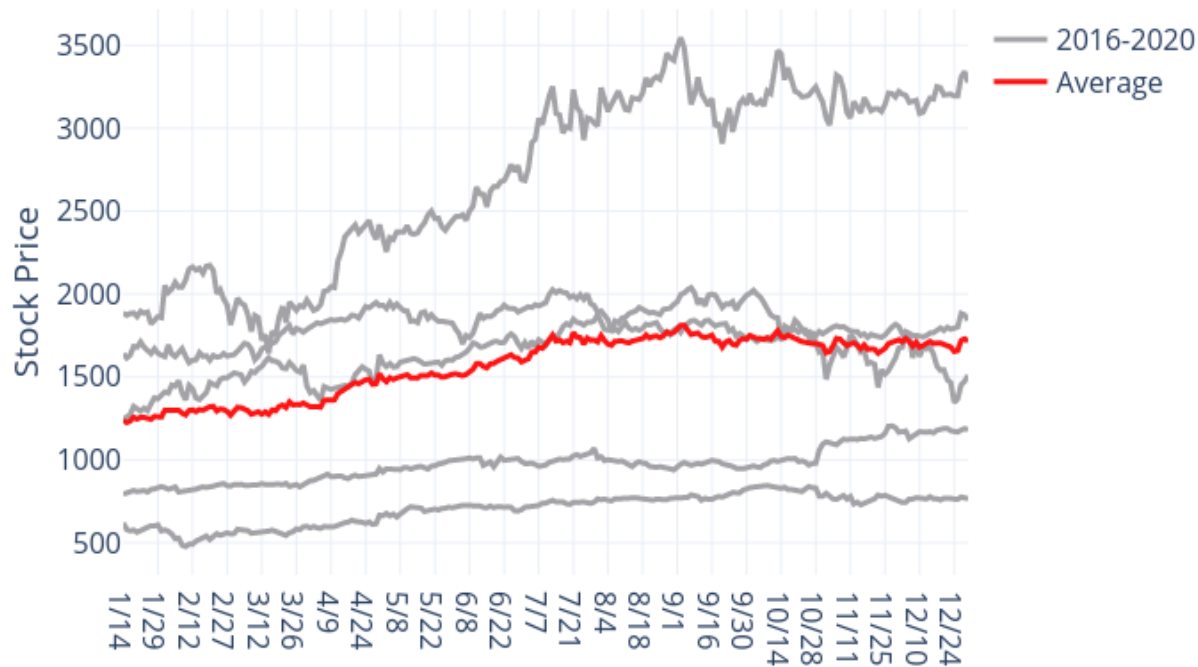
Think about the previous chart

- What is the purpose of having a different color for each year in the Amazon stock price plot?
- Can we re-create the same graph using just 2 colors without losing any information?

Amazon Stock Price Over the last 5 years



Amazon Stock Price Over the last 5 years

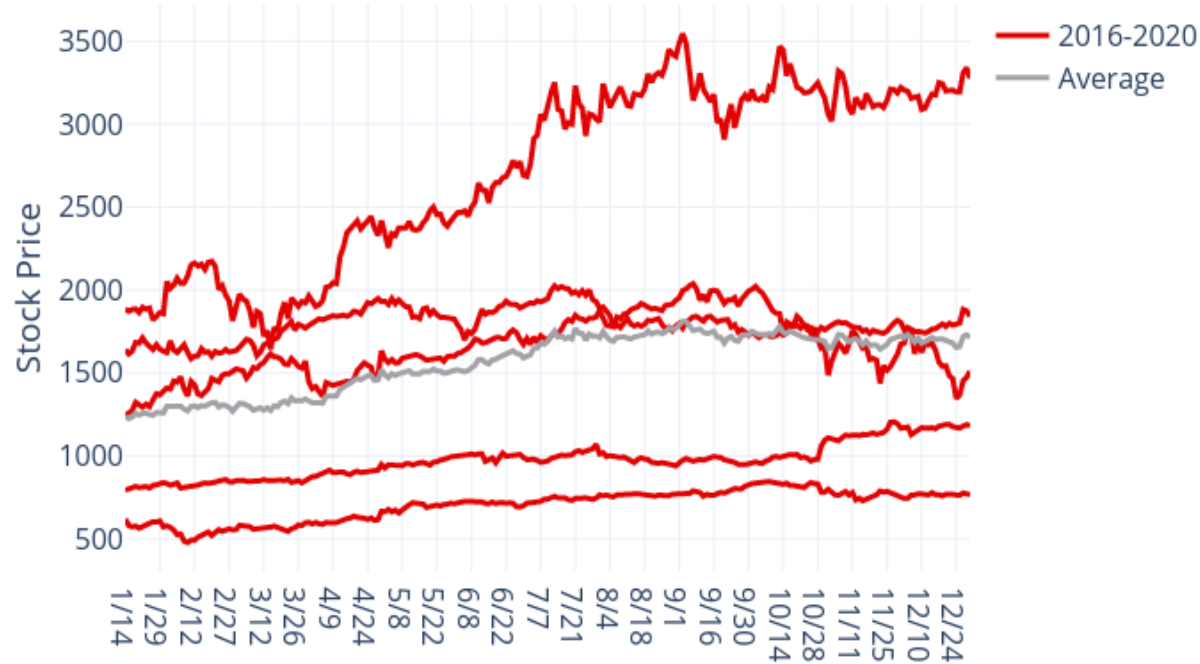


Making the average stock price stand out using color.

How does
color work in
this case?

- The stock prices for the specific years are perceived as a group because they are shown in the same color.
- The one that is different is the average stock price and the attention immediately goes to the different item.

Amazon Stock Price Over the last 5 years

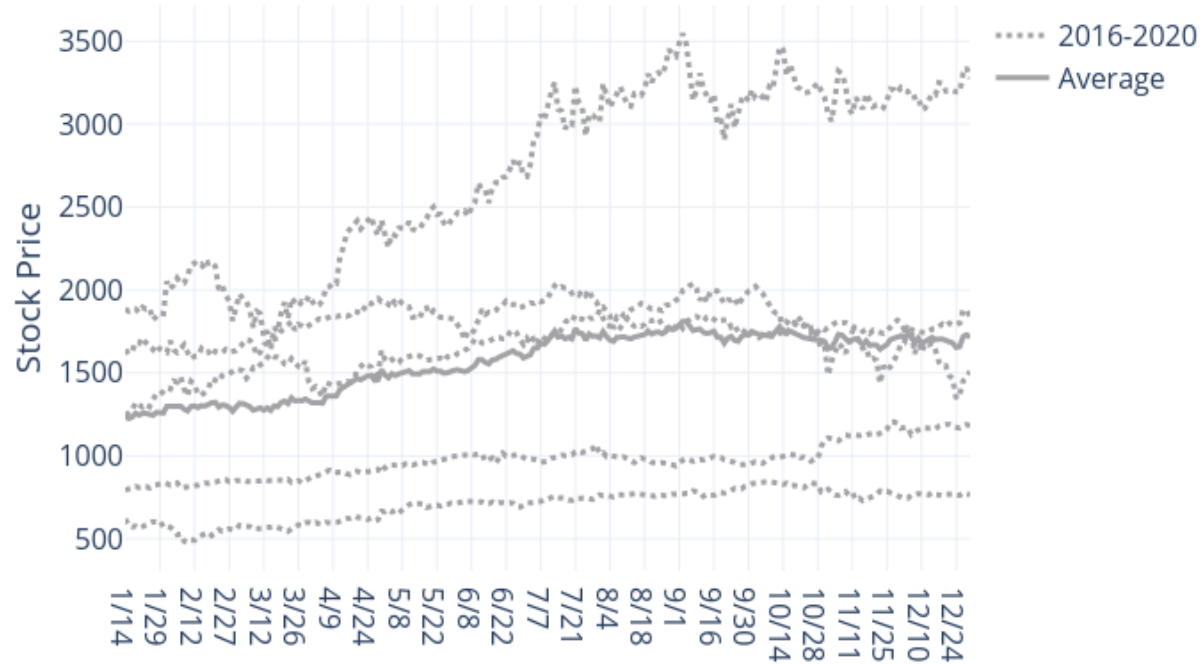


What is
wrong with
this one?

Answer:

The stock prices per year are still perceived as a group because they're shown in the same color. However, the average stock price does not stand out because the red color dominates the gray.

Amazon Stock Price Over the last 5 years



There are many other ways to draw attention

How many 0s
are in here?

565325802764397582568465289078432
478161865681653892561850618635813
658165816511654265436052786537562
807563701657

How many 0s
are in here?

5653258**0**2764397582568465289**0**78432
47816186568165389256185**0**618635813
658165816511654265436**0**52786537562
8**0**75637**0**1657

How many 0s
are in here?

565325802764397582568465289078432
478161865681653892561850618635813
658165816511654265436052786537562
807563701657

How many 0s
are in here?

56532580276439758256846528907843
24781618656816538925618506186358
13658165816511654265436052786537
5628075637016

How many 0s
are in here?

565325802764397582568465289078432
478161865681653892561850618635813
658165816511654265436052786537562
807563701657

You can keep
changing the color,
size, font boldness
etc. to emphasize
something but often it
is best to **de-
emphasize the rest.**
It can look much
cleaner.

565325802764397582568465289078432
478161865681653892561850618635813
658165816511654265436052786537562
807563701657

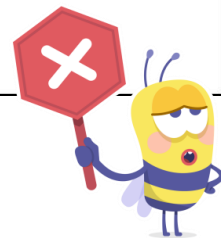
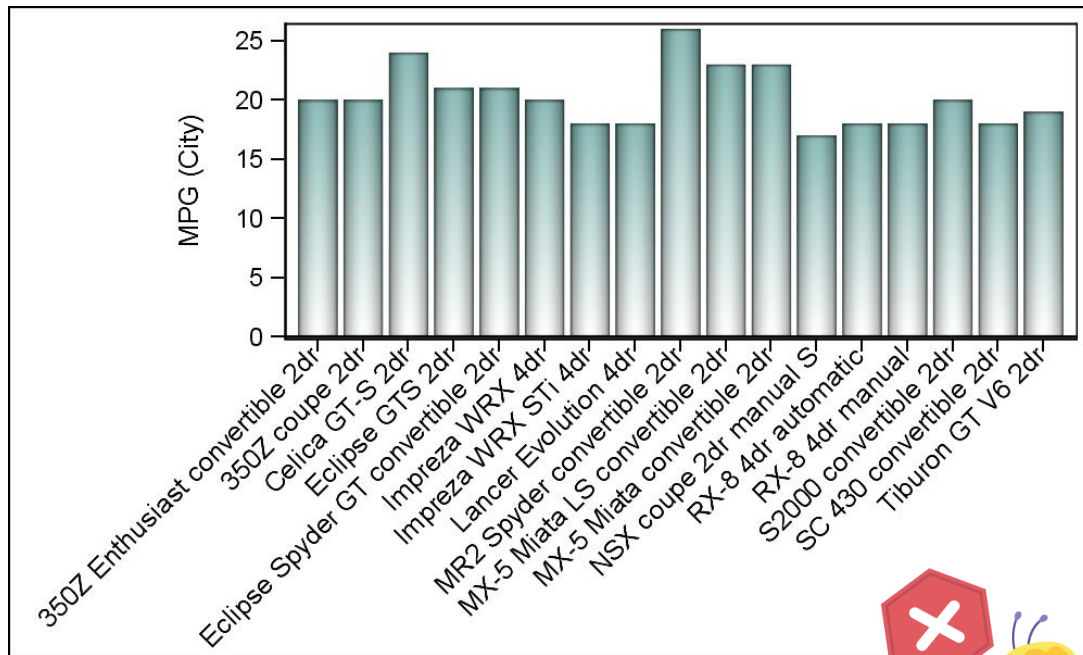
Explain your point with text

Text

- The use of text on a chart is tricky. It can be used to clarify and explain something to the audience but if there is too much text it can either 1) discourage the people from reading or 2) it can steal away their attention for too long.
- Do not use distracting fonts. Only use bold or italic to emphasize.
- All text must be readable.

Text

Try to keep all text horizontal.



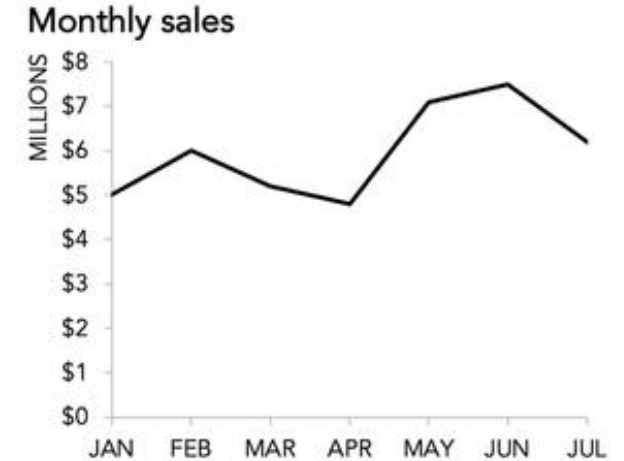
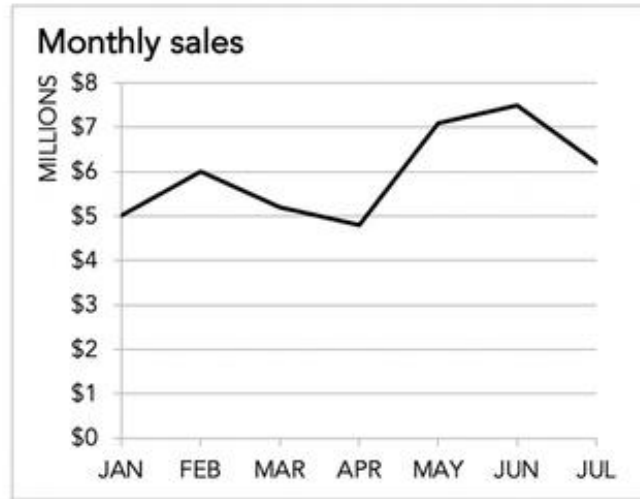
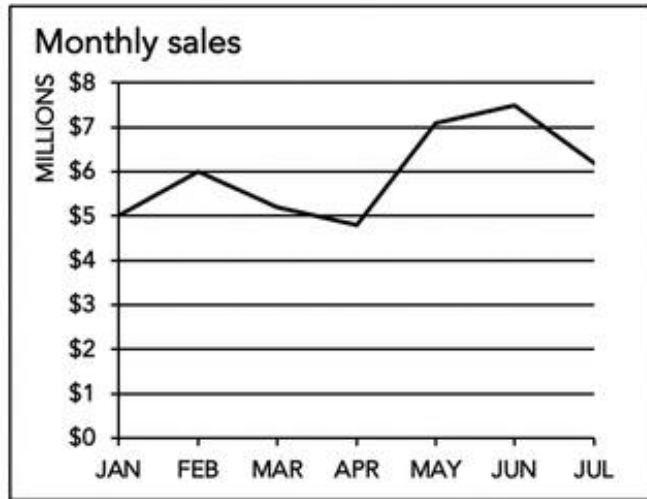
Declutter

Eliminate anything that does not directly help us understand the data. Try to be minimalistic.

Declutter

- It is more difficult to focus and find the important information on a busy chart.
- Keep it clean and things will stand out more.
- Only include in the chart things that are important to make your point.

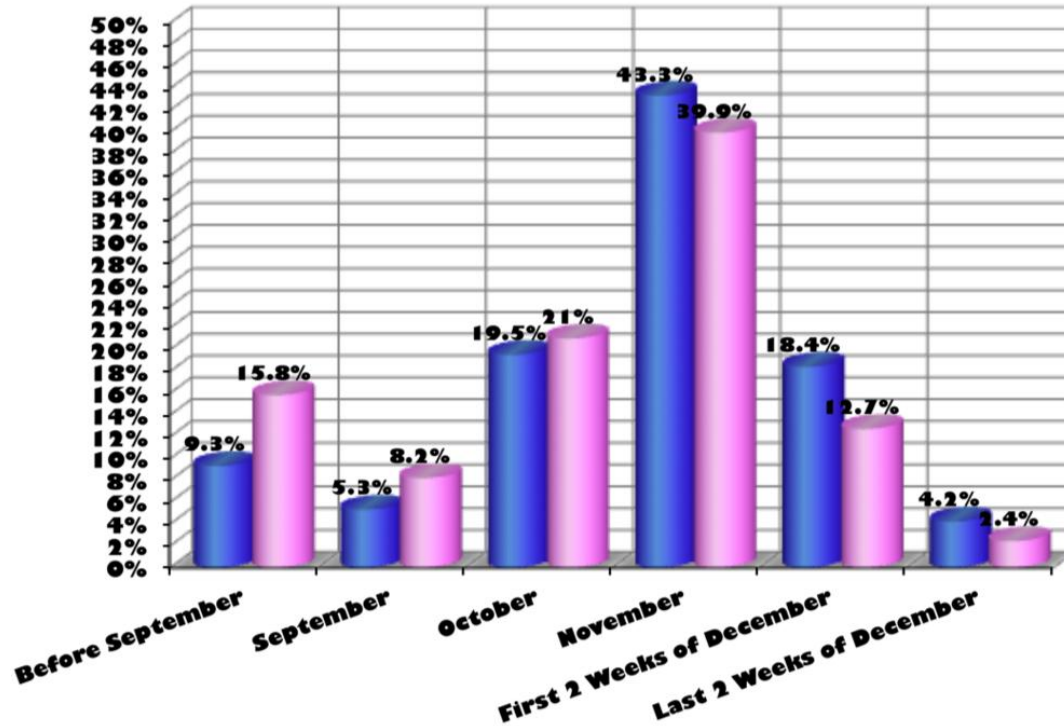
Examples of declutter



Examples of declutter

Shoppers Begins Shopping for Holidays

■ Men ■ Women



Before

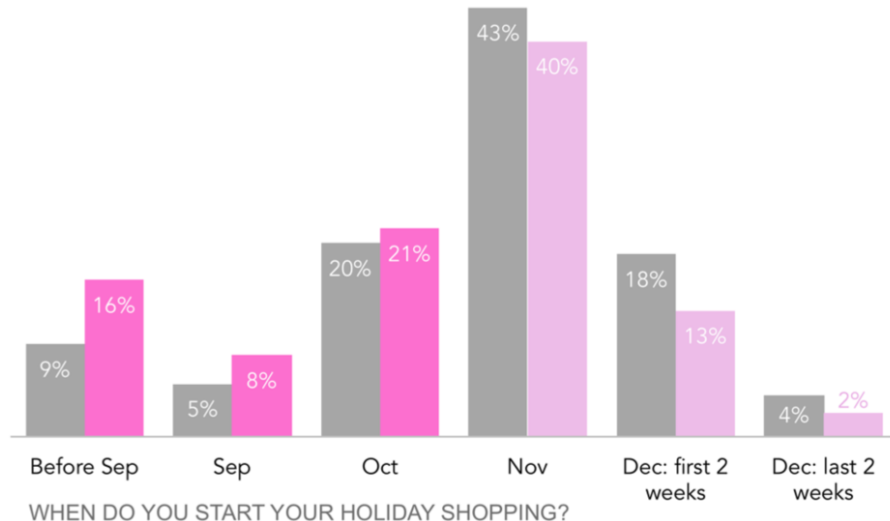


Examples of declutter

Color: tie takeaway to where to look in data

More women start their holiday shopping early

■ Men ■ Women
% OF TOTAL



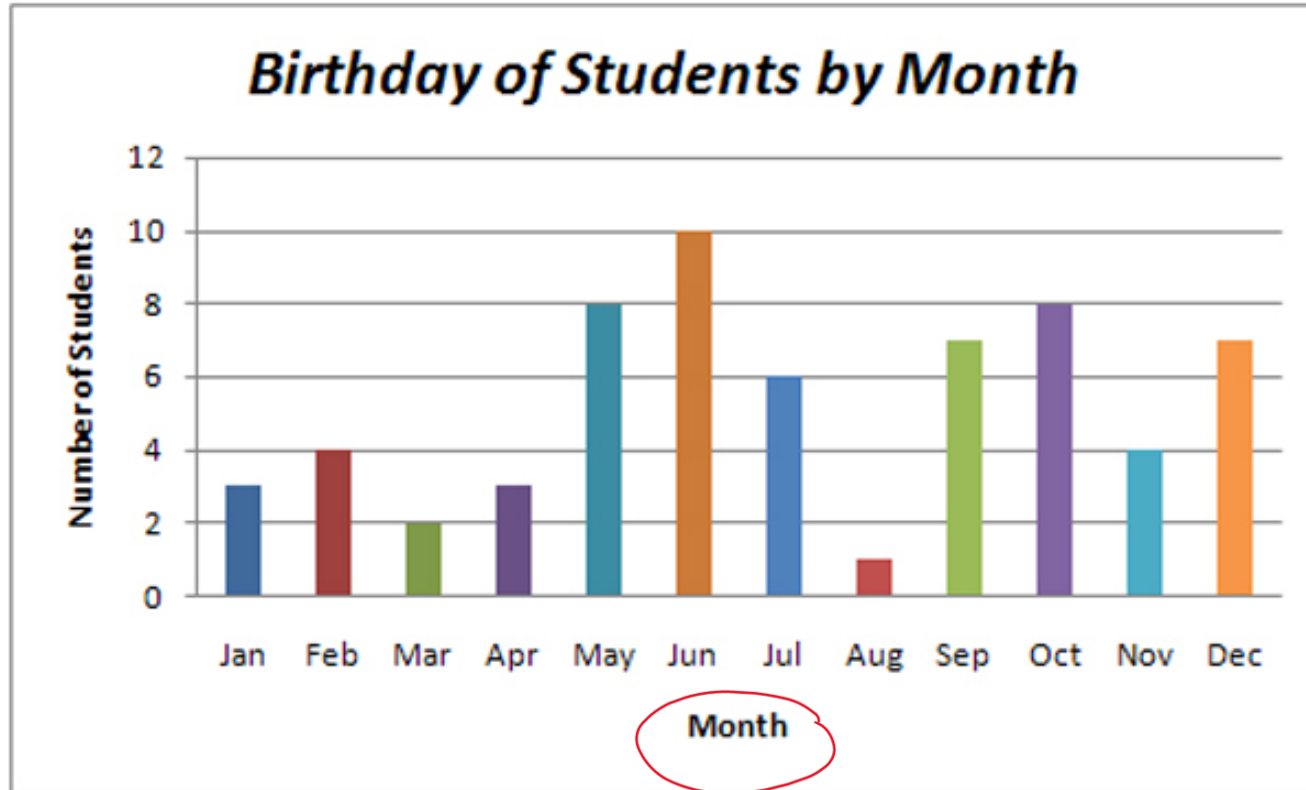
Now it's decluttered but it may still need some work.



Declutter rules

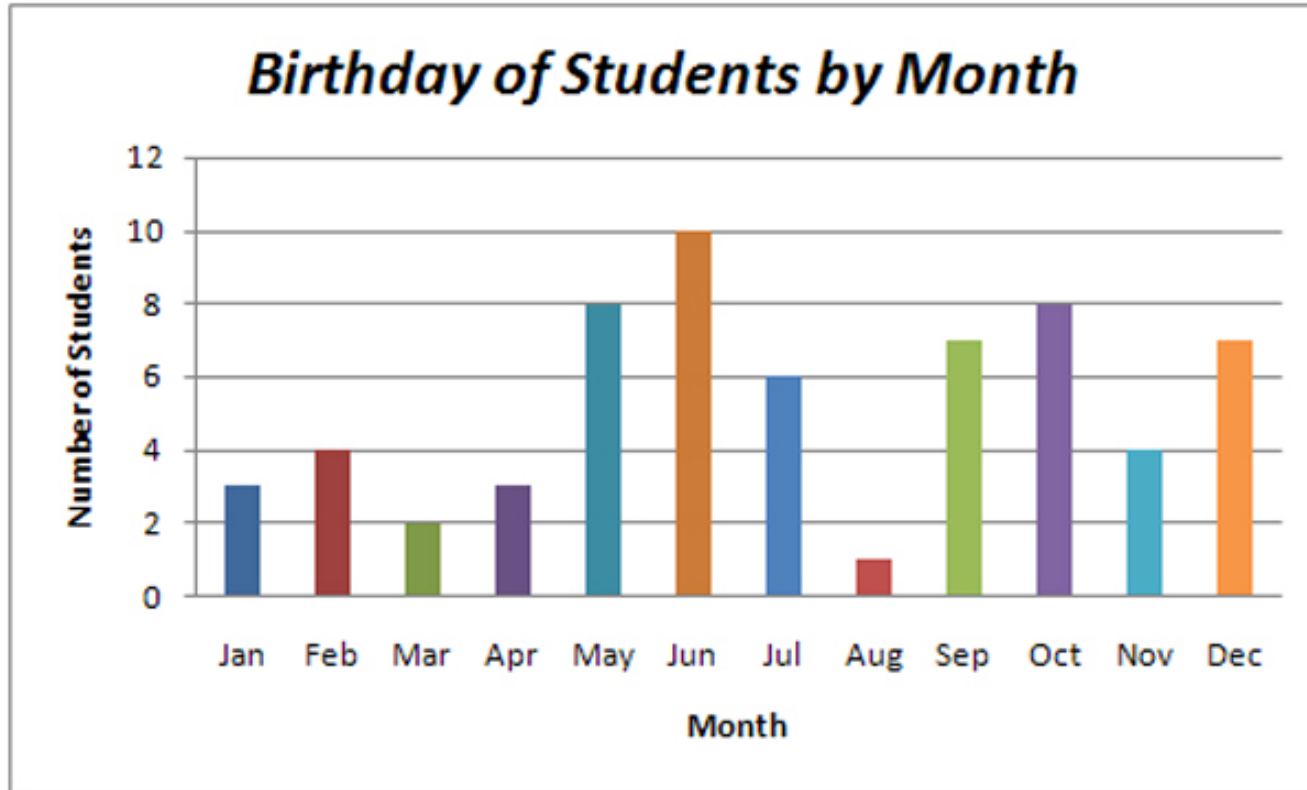
1. **Title:** Don't declutter by erasing your title. Always keep the title.
2. **Axes Labels:** You may be able to drop an axis label. You can usually skip having an axis label for categorical data (if the category names provide enough explanation) or dates. For numeric values you likely need labels.
3. **Grid:** Think about whether you need the grid or not. Even if you need it a light gray color will work better than bold black lines.
4. **Ticks and tick labels:** Don't have too many axis ticks and tick labels. Don't have too few either. Have just enough so people can understand the data.
5. **Legend:** Reading data from a legend is hard because you have to go back and forth between the legend and the graph. If possible, include the legend data in the chart area.

Declutter axes labels



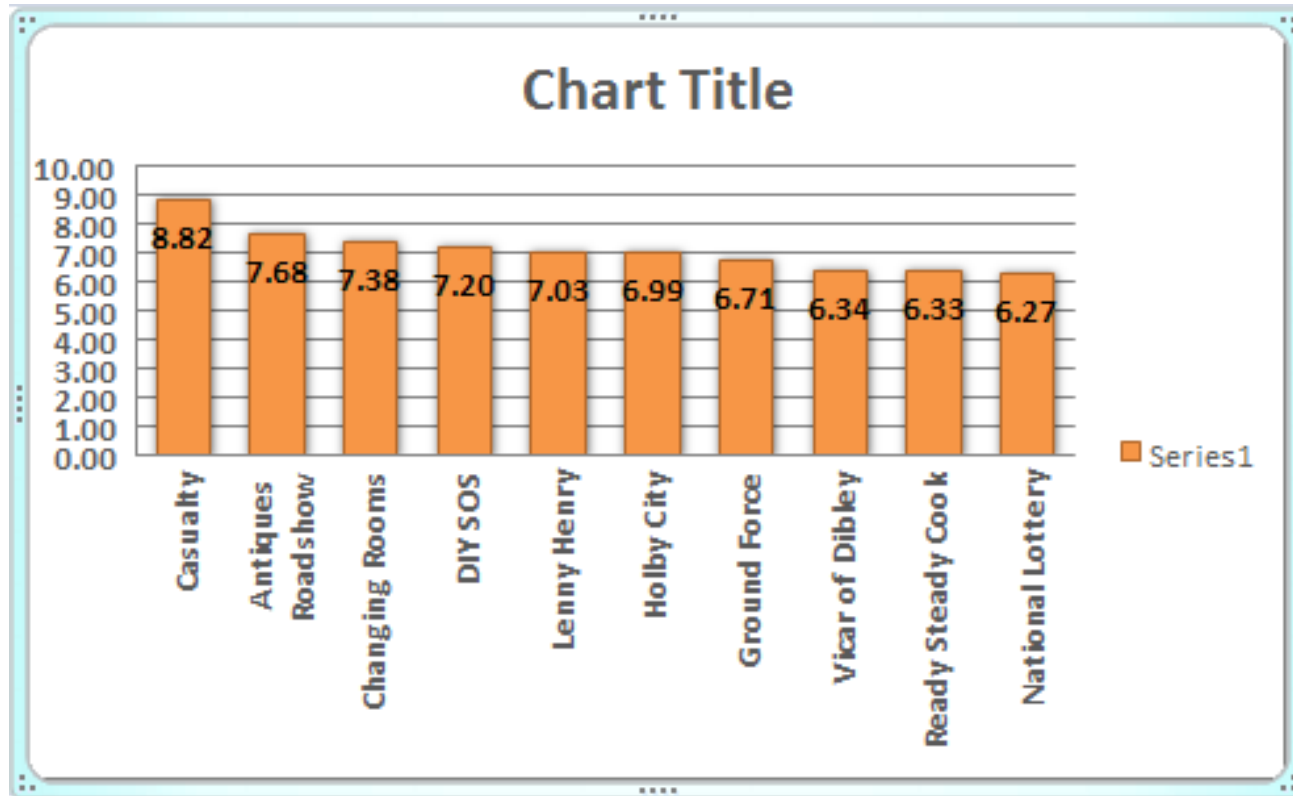
The label "Month" can go. It's obvious these are months

Declutter grid



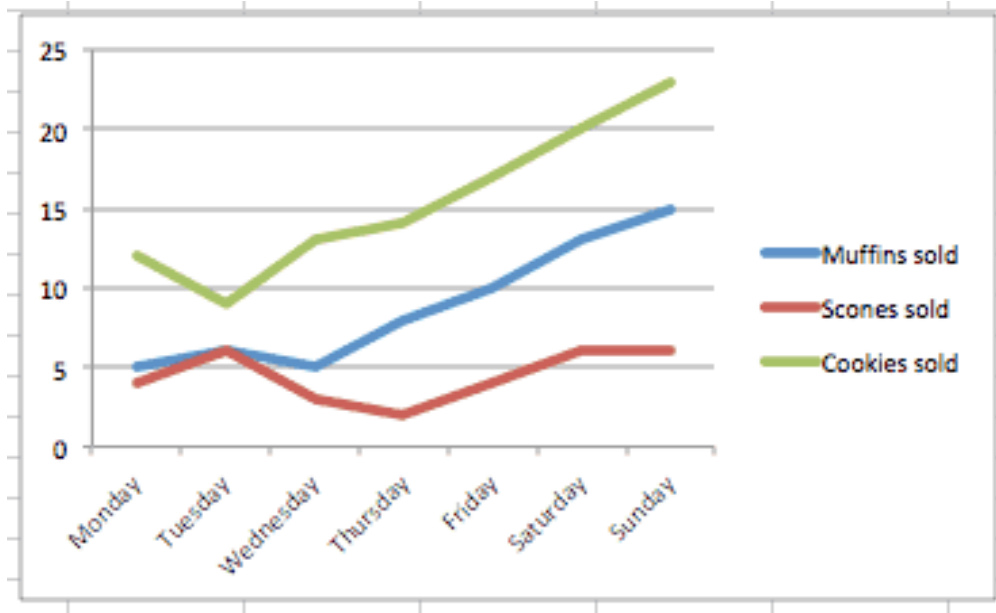
The grid is a bit much. The range along y is small and easy to follow. The grid should be a lighter color or entirely omitted.

Declutter ticks and tick labels



Especially if you are including the values on the data (in this case the exact values are on the bars) then you really don't need a busy grid and a lot of ticks and tick labels. Maybe you don't need any at all. What else can we do to clean up this chart?

Declutter legend



The word “sold” should be dropped from the legend. It’s too repetitive.

Instead of having a legend we can write muffins, scones and cookies by the corresponding line in the same color.

If a legend is still preferred, then the items should be arranged in the same order as the lines – green, blue, red.

Declutter legend

