**In class application: using scale, theme, and elements**

Remember, a good source for help is the ***Help*** tab in RStudio!

For this assignment we will be making extensive use of the following components:

* ***scale\_x\_continuous()***
* ***scale\_y\_continuous()***
* ***theme()***

In ***theme()***, we will be using the following subcomponents (**red** means new this week):

* ***axis.text.x – element\_text()***
* ***axis.text.y – element\_text()***
* ***axis.title.x – element\_text()***
* ***axis.title.y – element\_text()***
* ***plot.subtitle – element\_text()***
* ***plot.title – element\_text()***
* ***panel.grid.minor – minor axis lines, uses element\_line()***
* ***panel.grid.major—major axis lines, uses element\_line()***
* ***panel.background -- element\_rect()***
* ***plot.background -- element\_rect()***
* ***aspect.ratio – good for scaling images, set to fraction like 16/9, 4/3, 1/1***

**Assignment:**

* Do your best to replicate the image ***imageToReplicate.png***
* The image is based off the answer to application 3, which is available on the GitHub page (in ***application\_answers*** folder).
* Note: I am far more interested in the axes, title, and labels than the plot itself.
* Save the script file to the applications folder in your class RStudio Project
* Committ and Push the changes to your GitHub repository

R Color Names:

<http://www.stat.columbia.edu/~tzheng/files/Rcolor.pdf>

GGPlot Cheatsheet:

<https://rstudio.com/wp-content/uploads/2016/11/ggplot2-cheatsheet-2.1.pdf>