ggplot2 Quick Guide

Essential layers are needed to make the graph

1) **Data** frame
2) **aes**thetics: x, y, and z variables
3) **geom**etrics: Type of graph (scatter, line, bar, etc.)

Optional layers add flare and visual/statistical enhancements

4) **Facet**s: Place multiple plots on a single canvas
5) **Stat**istics: Add stat function, lines, and variance shades
6) **Coord**inates: Adjust or flip the x-y axis or x-y ratios to stretch or smooth out a plot
7) **Scale**:   Change colors or shapes
8) **Lab**els: Titles and labels
9) **Theme**:   Add professional and unique looks

Sample code format

ggplot(**Data**, **aes**(x = variable1, y = variable2, color/fill = variable3)) +

  geom_bar(color=outline, fill=inline, alpha=transparency, binwidth=1.5) +

  facet_grid(add multiple plots to the canvas) +

  coord_flip(flip the x and y axis) +

  scale_fill_manual/scale_color_brewer(change plot colors) +

  xlab('This will') +

  ylab('Eventually Become') +

  ggtitle('A Cool Plot!') +

  theme_lots of options() +

  theme(aspect.ratio=widens or narrows graph for visual appeal)