



```
#build a violin plot with added descriptives
ggplot(mpg, aes(x = factor (cyl), y = cty, fill = factor (cyl))) + geom_violin() +
  guides(colour = FALSE, fill = FALSE) +
  stat_summary (fun.data = mean_cl_boot, colour = "black", size = .5) +
  xlab("Number of Cylinders") + ylab("City Fuel Consumption (mpg)") +
  ggtitle ("City Fuel Consumption by Number of Cylinders")
```

Highway Fuel Consumption by Cylinder Displacement
for Each Vehicle Class



```
#facet wrap by vehicle class with displacement instead of cylinder number
ggplot(mpg, aes(displ, hwy, colour = class)) +
  geom_point() + facet_wrap(~class) +
  guides(colour = FALSE) + xlab("Displacement (litres)") + ylab("Highway Fuel Consumption
(mpg) ") +
  ggtitle ("Highway Fuel Consumption by Cylinder Displacement \nfor Each Vehicle Class")
```

Note I haven't explicitly used x = or y = here...