## R CHEATSHEET

9/14/2018

| FUNCTION                                | PURPOSE   | EXAMPLE  |
|---|---|--|
| median(x)                               | isolate median value of <b>x</b>  | median(TA_ages)<br>## [1] 29.5   |
| max(x)                                  | isolate maximum value of <b>x</b>   | max(TA_ages)<br>## [1] 489   |
| min(x)                                  | isolate minimum value of $\mathbf{x}$   | min(TA_ages)<br>## [1] 26  |
| sd(x)                                   | calculate standard deviation of $\mathbf{x}$  | sd(TA_ages)<br>## [1] 230.3483   |
| var(x)                                  | calculate variance of <b>x</b>  | <pre>var(TA_ages) ## [1] 53060.33</pre>  |
| na.omit(x)                              | remove rows of missing values from data frame <b>x</b>  | na.omit(firefly_weight)  |
| <pre>summarize(x,     y = )</pre>       | create a table summarizing data frame <b>x</b> with whichever calculations you would like                               | <pre>summarize(firefly_weight,     mean_ff = mean(weight),     sd_ff = sd(weight))</pre> |
| group_by(x, y)                          | invisibly group data frame <b>x</b><br>by variable <b>y</b>   | <pre>group_by(firefly, treatment)</pre>  |
| %>%                                     | the "pipe"; puts whatever is<br>to the left of it into the first<br>place of whatever function is<br>to the right of it | <pre>firefly %&gt;%   group_by(treatment) %&gt;%   summarize(m = mean(weight))</pre>     |
| <pre>sample(x, n)</pre>                 | randomly select <b>n</b> values from vector <b>x</b>  | sample(TA_ages, 2)   |
| sample_n(x, n)                          | randomly select $\mathbf{n}$ rows from data frame $\mathbf{x}$  | sample(firefly_weight, 12)   |
| <pre>geom_boxplot() geom_violin()</pre> | make a boxplot, violin plot,<br>scatterplot, or jittered<br>scatterplot; must always be                                 | <pre>p1 &lt;- ggplot(iris,</pre>   |
| <pre>geom_point() geom_jitter()</pre>   | attached to a base ggplot with a '+' sign   | <pre>p1 + geom_violin() p1 + geom_point() p1 + geom_jitter(width = 0.2,</pre>            |