

Independent Variable is?

Categorical (draw a bar chart)

Continuous (draw a scatterplot)

My data have replicates – each 'level' has at least three values

No

No

Redesign  
study or see  
'other' tests

Yes

How many 'levels' or  
categories do I have?

2

>2

Do histograms  
show major  
deviations from  
normal  
distributions?

No

Yes

t-test

Mann  
Whitney U

Do histograms show major  
deviations from normal  
distributions or variances  
unequal\*?

No

Yes

ANOVA

Kruskal  
Wallis

I have a good range of data  
> 7 data points?

Yes

Do plots show major  
deviations from normal  
distributions or variances  
unequal\*?

Yes

No

Spearman  
Correlation

Do I have a clear  
dependent and  
independent  
variable?

Yes

No

Regression

Correlation  
(Pearson)