

Defence Against the Dark Arts – Third Level Statistics						
Knowledge of				Translations	Applications	Analyses and Synthesis
Terms	Facts	Rules and Principles	Processes and Procedures			
Sample	A sample should be representative of the population	Check the source of the data being presented	Categorical data can be represented with tables, bar charts and pie charts	Select a suitable scale for a bar chart	Given a dataset, produce a bar chart.	Discuss whether a data source is robust
Population						
Bias	A random sample can be used to reduce bias	Check how the sample was conducted		Given a table, identify its corresponding pie or bar chart.	Given a dataset, produce a dot plot.	Contrast two data visualisations
Numerical	A larger sample can be used to reduce bias		Numerical data can be represented with dot plots			
Categorical		Check the scales of bar charts		Identify the sample and population	Explain why a data source might be biased	Explain why a data visualisation is misleading
Outlier	Data can be presented in misleading ways			Identify the type of data being presented	Interpret an outlier on a dot plot	
	A pie charts show proportion, and should sum to 100%					
	Bar charts are often easier to interpret than pie charts					