

Statistics

KS3 Stats (a)	Describe, interpret and compare observed distributions of a single variable through: appropriate graphical representation involving discrete, continuous and grouped data; and appropriate measures of central tendency (mean, mode, median) and spread (range, consideration of outliers)
KS4 Stats (1)	<u>Infer properties of populations or distributions from a sample, whilst knowing the limitations of sampling</u>
KS3 Stats (b)	Construct and interpret appropriate tables, charts, and diagrams, including frequency tables, bar charts, pie charts, and pictograms for categorical data, and vertical line (or bar) charts for ungrouped and grouped numerical data
KS4 Stats (2)	Interpret and construct tables, charts and diagrams, including frequency tables, bar charts, pie charts and pictograms for categorical data, vertical line charts for ungrouped discrete numerical data, <u>tables and line graphs for time series data</u> and know their appropriate use.
KS4 Stats (3)	Construct and interpret diagrams for grouped discrete data and continuous data, i.e. histograms with equal and unequal class intervals and cumulative frequency graphs, and know their appropriate use
KS4 Stats (4)	Interpret, analyse and compare the distributions of data sets from univariate empirical distributions through: -appropriate graphical representation involving discrete, continuous and grouped data, including box plots -appropriate measures of central tendency (median, mean, mode and modal class) and spread (range, including consideration of outliers, quartiles and inter-quartile range)
KS3 Stats (c)	Describe simple mathematical relationships between two variables (bivariate data) in observational and experimental contexts and illustrate using scatter graphs.
KS4 Stats (5)	Apply statistics to describe a population
KS4 Stats (6)	Use and interpret scatter graphs of bivariate data; recognise correlation <u>and know that it does not indicate causation; draw estimated lines of best fit; make predictions; interpolate and extrapolate apparent trends whilst knowing the dangers of so doing</u>