

<b>Topic</b>	<b>Foundation</b>	<b>Higher</b>
Collecting Data	Hypothesis, Population and Sample, Bias, Primary and secondary data, Leading questions, open and closed questions, Problems with collected data	Stratification & sampling, Simulation, outliers
Processing data	tally charts, two-way tables, Venn diagrams ,stem and leaf, frequency polygons, cumulative frequency tables, interpret population pyramids and choropleth maps, box plots, skewness in a box plot, histogram	use Venn diagrams for frequencies or probabilities, histograms, frequency polygons; cumulative frequency, estimate median, quartiles, deciles and percentiles from a cumulative frequency diagram
Summarising Data	Mean, mode, median, Modal class, Median group, Range and IQR, recognise graphical misrepresentation,	weighted mean, median for grouped data calculate standard deviation using a given formula or calculator functions
Scatter graphs	scatter diagrams including outliers; use and interpret a given line of best fit interpolation & extrapolation product moment correlation coefficient using calculator or spreadsheet	use the equation of a straight line (double mean point is required); PMCC =product moment correlation coefficient using calculator or spreadsheet calculate Spearman's rank correlation coefficient
Time Series		draw and interpret graphs for time series, including the use of appropriate moving averages to draw trend lines
Probability	Expected frequency 2 way tables Frequency Trees Venn Diagrams	Relative risk Conditional Probability with 2 way tables, Venn diagrams and frequency trees
Index Numbers		Index Chain Index
Normal Distribution	understanding that the normal distribution	– values more than three standard deviations from the mean are very unusual; – approximately 95% of the data lie within two standard deviations of the mean; and – 68% of the data (just over two thirds) lie within one standard deviation of the mean; z-scores;
Control Charts	plot sample means or medians on a control chart with given action and warning lines	
Binomial		Binomial as a model Binomial to get probabilities