

Y10 End of Year Exam Preparation: *Statistics*

Exam(s):

Exam 1: Calculator - 90 minutes

Revision Topic List	
Content	Skills
<ul style="list-style-type: none">• Collection of data	<ul style="list-style-type: none">• Describing data• Grouping data• Primary and secondary data• Populations• Peterson capture-recapture formula• Random sampling• Non-random sampling• Stratified sampling• Collection of data (inc simulation)• Questionnaires and interviews (inc random response method)• Problems with collected data (inc cleaning data)• Controlling extraneous variables (inc control groups and matched pairs)• Hypotheses
<ul style="list-style-type: none">• Processing and representing data	<ul style="list-style-type: none">• Tables (inc 2-way tables)• Pictograms• Bar charts• Stem and leaf diagrams• Pie charts, (inc comparative pie charts)• Population pyramids• Choropleth maps• Frequency polygons• Histograms• Cumulative frequency charts• The shape of a distribution (normal/skewed)• Misleading diagrams
<ul style="list-style-type: none">• Summarising data	<ul style="list-style-type: none">• Averages (inc from frequency tables and grouped data and linear interpolation)• Transforming data• Geometric and weighted mean• Measures of dispersion for discrete and grouped data (inc range, IQR, percentiles and deciles)

	<ul style="list-style-type: none"> • Standard deviation • Box plots and outliers • Skewness • Choosing the best average • Comparing data sets
<ul style="list-style-type: none"> • Time series 	<ul style="list-style-type: none"> • Draw and interpret time series graphs • Draw trend lines and describe trends/seasonal variation • Moving averages • Estimating seasonal variations and making predictions (use of average seasonal effect)

Tips on different revision techniques, including subject specific activities can be found in the [Student Study Support Guide](#).