

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 dataGrouping dataPrimary and secondary dataPopulationsPeterson capture-recapture formulaRandom samplingNon-random samplingStratified samplingCollection 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)Stem and leaf diagramsPie charts, (inc comparative pie charts)Population pyramidsChoropleth mapsFrequency polygonsHistogramsCumulative frequency chartsThe 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 dataGeometric and weighted meanMeasures of dispersion for discrete and grouped data (inc range, IQR, percentiles and deciles)Standard deviationBox plots and outliers

	<ul style="list-style-type: none"> • Skewness • Choosing the best average • Comparing data sets
<ul style="list-style-type: none"> • Scatter diagrams and correlation 	<ul style="list-style-type: none"> • Scatter diagrams • Correlation • Equation of a line of best fit • Compare regression equations • Interpret Spearman's and Pearson's
<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)

Remember that you can access all the lesson content covered this year on Google Classroom – this should prove very useful.

Mathsgenie and Stats Academy are great websites to support your revision, scroll down below the past papers where you will find exam questions sorted by topic, some of which have videos too.

<https://www.mathsgenie.co.uk/statistics.html>

<https://www.statsacademy.co.uk/>

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