2024 Y11 Mock Exam Preparation: *Statistics*

Mock Exam(s):
Exam 1: Calculator - 90 minutes
Exam 2: Calculator - 90 minutes

Revision Topic List	
Content	**Skills**
- **Collection of data**	- **Types of data** - **Interpret data from a table and grouped frequency table** - **Sampling methods - explain choices of techniques** - **Questionnaires** - **Writing a hypothesis** - **Sources of data** - **Stratified sampling** - **Extraneous variables** - **Know what charts/calculations to include in a statistical plan** - **Matched pairs** - **Critique a data collection and presentation plan** - **Capture-recapture**
- **Processing and representing data**	- **Choropleth maps** - **Construct and interpret stem and leaf diagram (including back to back)** - **Interpret population pyramids** - **Suitability of frequency polygons** - **Histograms (unequal class width): use frequency density to draw; interpret and compare data sets** - **Compare, construct and interpret pie charts and comparative pie charts** - **Construct and interpret box plots** - **Construct and interpret a cumulative frequency graph**
- **Summarising data**	- **Calculate estimate of mean** - **Interpret skew** - **Compare data sets using statistical measures and consider appropriateness**
- **Scatter diagrams and correlation**	- **Calculate and interpret Spearman's** - **Interpret Pearson's** - **Interpret figures from regression equations (gradient and y-intercept)**

	- **Interpolation / extrapolation**
- **Time series**	- **Seasonal trends** - **Moving averages** - **Plotting and interpreting a trend line** - **Seasonal and average seasonal effect**
- **Probability**	- **Tree diagrams** - **Determine and interpret relative risks and absolute risks, and express in terms of expected frequencies in groups** - **Construct and interpret a Venn diagram** - **Set notation** - **Formal notation for conditional probability**
- **Index numbers and rates of change**	- **Index numbers (inc chain-based)** - **Interpreting CPI (consumer price index)** - **Weighted index numbers** - **Geometric mean**
- **Probability distributions**	- **Control charts (quality assurance)** - **Use action and warning lines in quality assurance sampling applications** - **Calculate and interpret standardised scores**

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

Top Statistics websites for revision are;
Maths genie - https://www.mathsgenie.co.uk/statistics.php
Stats Academy - https://www.statsacademy.co.uk
Further info including a link to revision notes can be found [here](#)