Year 13 Statistics Curriculum Summary

– Y13 Statistics

When?	Topic	Knowledge	Unit Assessment
HALF TERM 1	**Regression, correlation and hypothesis testing**	• Understand exponential models in bivariate data • Use a change of variable to estimate coefficients in an exponential model • Understand and calculate the product moment correlation coefficient • Carry out a hypothesis test for zero correlation	• exponential models • product moment correlation coefficient • hypothesis test for zero correlation
HALF TERM 3	**Conditional probability**	• Understand set notation in probability • Understand conditional probability • Solve conditional probability problems using two-way tables and Venn diagrams • Use probability formulae to solve problems • Solve conditional probability using tree diagrams	• set notation • conditional probability • two-way tables • Venn diagrams • tree diagrams • conditional probability
HALF TERM 5	**The normal distribution**	• Understand the normal distribution and the characteristics of a normal distribution curve • Find percentage points on a standard normal curve • Calculate values on a standard normal curve • Find unknown means and/or standard deviations for a normal distribution • Approximate a binomial distribution using a normal distribution • Select appropriate distributions and solve real-life problems in context • Carry out a hypothesis test for the mean of a normal distribution	• normal distribution • percentage points • values on a standard normal curve • unknown means and/or standard deviations • Approximate a binomial distribution using a normal distribution • hypothesis test for the mean of a normal distribution

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HALF TERM 4	**Correlation**	• Draw and interpret scatter diagrams for bivariate data • Interpret correlation and understand that it does not imply causation • Interpret the coefficients of a regression line equation for bivariate data • Understand when you can use a regression line to make predictions	• scatter diagrams • Interpret correlation • Interpret the coefficients of a regression line • when you can use a regression line
HALF TERM 5	**Probability**	• Calculate probabilities for single events • Draw and interpret Venn diagrams • Understand mutually exclusive and independent events, and determine whether two events are independent • Use standard tree diagrams	• probabilities for single events • Venn diagrams • mutually exclusive • independent events • standard tree diagrams
HALF TERM 6	**Statistical distributions**	• Understand and use simple discrete probability distributions including the discrete uniform distribution • Understand the binomial distribution as a model and comment on appropriateness • Calculate individual probabilities for the binomial distribution • Calculate cumulative probabilities for the binomial distribution	• simple discrete probability distributions • discrete uniform distribution • binomial distribution • individual probabilities for the binomial distribution • cumulative probabilities for the binomial distribution