

Year 10 Statistics Curriculum Map

| Topic | | Learning Objectives |
|-------|----------------------------------|---|
| 1 | Representing Data | Justify appropriate format to represent data |
| | | Graphical misrepresentation |
| | | Determine skewness by inspection |
| | | Comparing Data sets represented in different formats |
| 2 | Measures of Central Tendency | Averages from raw or grouped data |
| | | Weighted mean |
| | | Geometric mean |
| | | Justify appropriate average to use in context |
| 3 | Measures of Dispersion | Range, quartiles, interquartile range (IQR), percentiles |
| | | Interpercentile Range, Interdecile range |
| | | Standard deviation |
| | | Identifying outliers by inspection |
| | | Identifying outliers by calculation |
| | | Comment on outliers in context |
| | | Compare data sets using appropriate measure of central tendency and measure of dispersion |
| 4 | Scatter Diagrams and Correlation | Explanatory (independent) variables and response (dependent) variables |
| | | Correlation |
| | | Line of best fit |
| | | Calculate Spearman's Rank correlation coefficient |
| | | Interpret Spearman's Rank in context |
| | | Interpret Pearson's Product moment correlation coefficient (PMCC) in context |
| | | Understand the distinction between Spearman's Rank and Pearson's PMCC |

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| 5 | Time Series | Averages from raw or grouped data |
| | | Identifying trends |
| | | Identifying seasonal and cyclical trends in context |
| 6 | Experimental and Theoretical Probability | Experimental and Theoretical Probability |
| 7 | Index Numbers | Index numbers |
| | | Interpret data related to rates of change over time when given in graphical form |
| 8 | Measures of Dispersion | Compare data sets using appropriate measure of central tendency and measure of dispersion |
| 9 | Probability Distribution | Binomial distribution |
| | | Normal distribution |
| | | Distribution |
| 10 | Quality Assurance | Know that a set of sample means are more closely distributed than individual values from the same population |
| | | Control charts |