MCS AP Statistics Subject Group Overview

Unit Name	Unit 1: Exploring One-Variable Data	Unit 2: Exploring Two-Variable Data	Unit 3: Collecting Data	Unit 4: Probability, Random Variables, and Probability Distributions	Unit 5: Sampling Distributions	Unit 6: Inference for Categorical Data: Proportions	Unit 7: Inference for Quantitative Data: Means	Unit 8: Other Inference Topics (Chi-Square and Slopes)
Time Frame	4-5 weeks	2-3 weeks	3-4 weeks	3-4 weeks	2-3 weeks	5-6 weeks	3-4 weeks	1-2 weeks
Standards	1.1 - 1.10	2.1 - 2.9	3.1 - 3.7	4.1 - 4.12	5.1 - 5.8	6.1 - 6.11	7.1 - 7.10	8.1 - 8.7, 9.1- 9.6

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	Content Specific Information	1.1 Introducing Statistics: What Can We Learn from Data? 1.2 The Language of Variation: Variables 1.3 Representing a Categorical Variable with Tables 1.4 Representing a Categorical Variable with Graphs 1.5 Representing a Quantitative Variable with Graphs 1.6 Describing the Distribution of a Quantitative Variable 1.7 Summary Statistics for a Quantitative Variable 1.8 Graphical Representations of Summary Statistics 1.9 Comparing Distributions of a Quantitative Variable 1.10 The Normal Distribution	2.1 Introduction Statistics: Are Variables Related? 2.2 Representing Two Categorical Variables 2.3 Statistics for Two Categorical Variables 2.4 Representing the Relationship Between Two Quantitative Variables 2.5 Correlation 2.6 Linear Regression 2.7 Residuals 2.8 Least Squares Regression 2.9 Analyzing Departures from Linearity	3.1 Introducing Statistics: Do the Data We Collected Tell the Truth? 3.2 Introduction to Planning a Study 3.3 Random Sampling and Data Collection 3.4 Potential Problems with Sampling 3.5 Introduction to Experimental Design 3.6 Selecting a Experimental Design 3.7 Inference and Experiments	4.1 Introducing Statistics: Random and Non-Random Patterns? 4.2 Estimating Probabilities Using Simulation 4.3 Introduction to Probability 4.4 Mutually Exclusive Events 4.5 Conditional Probability 4.6 Independent Events and Unions of Events 4.7 Introduction to Random Variables and Probability Distributions 4.8 Mean and Standard Deviation of Random Variables 4.9 Combining Random Variables 4.10 Introduction to the Binomial Distribution 4.11 Parameters for a Binomial Distribution 4.12 The Geometric Distribution	5.1 Introducing Statistics: Why is My Sample Not Like Yours? 5.2 The Normal Distribution Revised 5.3 The Central Limit Theorem 5.4 Biased and Unbiased Point Estimates 5.5 Sampling Distributions for Sample Proportions 5.6 Sampling Distributions for Differences in Sample Proportion 5.7 Sampling Distribution for Sample Means 5.8 Sampling Distributions for Difference in Sample Means	6.1 Introducing Statistics: Why Be Normal? 6.2 Constructing a Confidence Interval for a Population Proportion 6.3 Justifying a Claim Based on a Confidence Interval for a Population Proportion 6.4 Setting Up a Test for a Population Proportion 6.5 Interpreting P-Values 6.6 Concluding a Test for a Population Proportion 6.7 Potential Errors When Performing Tests 6.8 Confidence Intervals for the Difference in Two Proportions 6.9 Justifying a Claim Based on a Confidence Interval for a Difference of Population Proportions 6.10 Setting Up a Test for the Difference of Two Population Proportions 6.11 Carrying Out a Test for the Difference of Two Proportions	7.1 Introducing Statistics: Should I Worry About Error? 7.2 Constructing a Confidence Interval for a Population Mean 7.3 Justifying a Claim About a Population Mean Based on a Confidence Interval 7.4 Setting Up a Test for a Population Mean 7.5 Carrying Out a Test for a Population Mean 7.6 Confidence Intervals for the Difference of Two Means 7.7 Justifying a Claim About the Difference of Two Means Based on a Confidence Interval 7.8 Setting Up a Test fo a Difference of Two Population Means 7.9 Carrying Out a Test for the Difference of Two Population Means 7.10 Skills Focus: Selecting, Implementing and Communicating Inference Procedures	8.1 Introducing Statistics: Are My Results Unexpected? 8.2 Setting Up a Chi-Square Goodness of Fit Test 8.3 Carrying Out a Chi-Square Goodness of Fit Test 8.4 Expected Counts in Two-Way Tables 8.5 Setting Up a Chi-Square Test for Homogeneity or Independence 8.6 Carrying Out a Test for a Chi-Square Test for Homogeneity or Independence 8.7 Skills Focus: Selecting an Appropriate Procedure for Categorical Data 9.1 Introducing Statistics: Do Those Points Align? 9.2 Confidence Intervals for the Slope of a Regression Model 9.3 Justifying a Claim About the Slope of a Regression Model Based on a Confidence Interval 9.4 Setting Up a Test for the Slope of a Regression Model 9.5 Carrying Out a Test for the Slope of a Regression Model 9.6 Skills Focus: Selecting an Appropriate Inference Procedure

Published: 8,2025 Resources, materials, assessments not linked to SGO or unit planner will be reviewed at the local school level.

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	Common Assessments/ Performance Projects	Common Unit Formative Common Unit Summative	Common Unit Summative	Common Unit Formative Common Unit Summative	Common Unit Formative Common Unit Summative	Common Unit Summative	Common Unit Formative Common Unit Summative	Common Unit Summative	Common Unit Formative
	Differentiation For Tiered Learners	Marietta City Schools teachers provide specific differentiation of learning experiences for all students. Details for differentiation for learning experiences are included on the district unit planners.							