

### Corsica Stickney Curriculum Map

<p>Subject: Mathematics</p> <p>Grade: 7th</p> <p>Unit5</p> <p>Module 10 Lesson 10.1,10.2,10.3</p> <p>Module 11 Lesson 11.1,11.2,11.3</p>	<p>Teacher: Mr. Jason Broughton</p> <p>Duration: March</p>
<p>Summary of unit:</p> <p>Students will be able to solve real-world problems by analyzing and comparing data.</p> <p>Students will be able to use random samples and populations to solve real-world problems.</p>	
<p><b>Stage 1 – Desired Results</b></p>	
<p>Standards:</p> <p>7.RP.2c Represent proportional relationships by equations.</p> <p>7.SP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.</p> <p>7.SP.2 Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions.</p> <p>7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.</p> <p>7.SP.4 Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.</p>	<p>Essential Questions:</p> <p>How can you use a sample to gain information about a population?</p> <p>How can you use proportional reasoning to solve multistep ratio problems?</p> <p>How can you use a random sample to make inferences about a population?</p> <p>How can you generate and use random samples to represent a population?</p> <p>How do you compare two sets of data displayed in dot plots?</p> <p>How do you compare two sets of data displayed in box plots?</p> <p>How can you use statistical measures to compare populations?</p>

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Language objective	Mathematical practices	Integrate mathematical practice
<p>Students will explain how to use a sample to gain information about a population.</p> <p>Students will summarize how to use a sample to gain information about a population</p> <p>Students will demonstrate how to generate and use random samples to represent a population.</p> <p>Students will describe how to compare two sets of data displayed in dot plots.</p> <p>Students will show how to compare two sets of data displayed in box plots.</p> <p>Students will explain how to use statistical measures to compare populations.</p>	<p>MP.6 Attend to precision.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.7 Look for and make use of structure.</p>	<p>MP.6 It calls for students to explain mathematical ideas and arguments using precise mathematical language in written or oral communication. Students use mathematical definitions to explain whether a given sample is random or biased. Then students explain whether survey questions could be biased based on the language used in the questions.</p> <p>MP.4 It calls for students to model with mathematics. Students learn to model sets of data using dot plots and box plots, and then use the representations to make inferences. They learn to represent and solve real-world problems using proportions.</p> <p>MP.5 Students use graphing calculators to generate random samples and then make predictions about an entire population. Students also simulate a random selection of numbers without technology by using numbered pieces of paper and a paper bag, and use the results to make predictions about a population.</p> <p>MP.7 It calls for students to analyze mathematical relationships to connect and communicate mathematical ideas. Students analyze pairs of dot plots, both visually and numerically. They also find and compare the medians and the ranges of the dot plots. In this way, students have analyzed mathematical relationships to communicate mathematical ideas</p>
Stage 2 – Assessment Evidence		

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Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests
<b>Stage 3 – Learning Plan</b>	
Learning Activities: procedures/topics Reading and discussing lesson with class. Giving students examples to be completed in class. Students taking notes and using notes to complete homework assignments.	
<div style="text-align: center;"><b>Lesson Description</b></div> MODULE 10    Random Samples and Populations  Lesson 10.1 Populations and Samples Lesson 10.2 Making Inferences from a Random Sample Lesson 10.3 Generating Random Samples .  MODULE 11 Analyzing and Comparing Data  Lesson 11.1 Comparing Data Displayed in Dot Plots Lesson 11.2 Comparing Data Displayed in Box Plots Lesson 11.3 Using Statistical Measures to Compare Populations	