Corsica Stickney Curriculum Map

Subject: Mathematics Grade: 7th Unit6 Module12 Lesson 12.1,12.2,12.3,12.4,	Teacher: Mr. Jason Broughton Duration: April
Summary of unit: Students will be able to use experimental probability to solve real-world problems.	
Stage 1 – Desired Results	
Standards: 7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers. 7.RP.2c Represent proportional relationships by equations. 7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. 7.SP.5 Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. 7.SP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. 7.SP.7 Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. 7.SP.7b Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. 7.SP.8 Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.	Essential Questions: How can you describe the likelihood of an event? How do you find the experimental probability of a simple event? How do you find the experimental probability of a compound event? How do you make predictions using experimental probability?

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7.SP.8a Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. 7.SP.8b Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams…. 7.SP.8c Design and use a simulation to generate frequencies for compound events.	

Language objective	**Mathematical practices**	**Integrate mathematical practice**
Students will describe the likelihood of an event in words. Students will explain how to find the experimental probability of a simple event. Students will present how to find the experimental probability of a compound event Students will explain how to make predictions using experimental probability.	MP.6 Attend to precision. MP.4 Model with mathematics. MP.2 Reason abstractly and quantitatively.	MP.6 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to display, explain, and justify mathematical ideas using precise mathematical language in written or oral communication. Students learn the definitions for probabilistic events and connect the likelihood of an event to probabilities. Next, they identify the sample space for an event and use a ratio to find the probability of a simple event. Finally, students find the complement of an event. In this way, students are able to use precise language to communicate about probability MP.4 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to model with mathematics. Students learn to use experimental data to create a probability model for the likelihood of an event. They also use these probability models to make predictions about future events.

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		MP.2 This lesson provides an opportunity to address this Mathematical Practice standard. It calls for students to create and use representations to organize, record, and communicate mathematical ideas. Students use lists to find the sample space for a compound event. They use data in tables to find the experimental probability of a compound event. Next, students choose a model for a simulation, perform the simulation, and use a table to record the results. Finally, they use the simulation results to make a prediction. In this way, students create and use a variety of representations to organize, record, and interpret experimental probability in real-world situations.

Stage 2 – Assessment Evidence

Performance Tasks: Homework quizzes, worksheet, Tests.	Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests

Stage 3 – Learning Plan

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.

Lesson Description

MODULE 12 Experimental Probability

Lesson 12.1 Probability
Lesson 12.2 Experimental Probability of Simple Events
Lesson 12.3 Experimental Probability of Compound Events
Lesson 12.4 Making Predictions with Experimental Probability

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