

Corsica Stickney Curriculum Map

Subject: Algebra 1 Grade: 9 th Unit 1 Module 1: Quantitative reasoning Lessons: 1.1, 1.2, 1.3		Teacher: Mr. Jason Broughton Duration: August 2019	
Summary of unit: Students will be able to model real-world situations and interpret algebraic expressions.			
Stage 1 - Desired Results			
Standards A-REI.1 Explain each step in solving a simple equation... Construct a viable argument to justify a solution method. N-Q.2 Define appropriate quantities for the purpose of descriptive modeling. N-Q.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities		Essential Questions: How do you solve an equation in one variable? How can you use rates, ratios, and proportions to solve real-world problems? How do you use significant digits when reporting the results of calculations involving measurement?	
Language objective	Mathematical practices	Integrate mathematical practices	
Explain to a partner the meaning of each Property of Equality. Demonstrate to a partner how to use dimensional analysis to convert a rate Show how to determine how many significant digits to report in the results of measurement calculations, such as finding perimeter and area.	MP.7 Using Structure MP.2 Reasoning MP.5 Using Tools	MP.4 Model the concept of solving an equation by showing students a two-pan balance with equal weight on both sides. Ask students what will happen if you add or subtract weight on one side only. Demonstrate that adding or removing weights on one side of the scale makes it unbalanced. Then ask students what will happen if you add or subtract the same amount of weight on both sides of the scale. Demonstrate this. Explain that equations are like balances. The two sides must be kept equal, so the same operation must be performed on both sides of the equation. MP.2 Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to	

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		<p>decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved.</p> <p>Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.</p>
Stage 2 – Assessment Evidence		
<p>Performance Tasks: Homework quizzes, worksheet, Tests.</p>	<p>Unit Pre-Assessment: Assign ready-made or customized practice tests to prepare students for high-stakes tests</p>	
Stage 3 – Learning Plan		
<p>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.</p>		
Lesson Descriptions		
<p>Lesson 1.1 Solving equations Lesson 1.2 Modeling quantities Lesson 1.3 Reporting with Precision and Accuracy</p>		

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