

Curriculum Mapping

Subject: Algebra I

Grade: High School

	1 st 6 weeks (28 days)	2 nd 6 weeks (27 days)	3 rd 6 weeks (25 days)
Focus (major concepts)	<ul style="list-style-type: none"> • Patterns and Generalizations • Domain and Range • Linear Functions • Function Notation 	<ul style="list-style-type: none"> • Slope as a rate of change • $y = mx + b$ • $Ax + By = C$ 	<ul style="list-style-type: none"> • Graphing
Essential Questions	<ul style="list-style-type: none"> • How do you know if something is independent or dependent? • Why is generating a plan to predict a value in a sequence important? • What are the different ways that you can illustrate or describe domain and range? • How can you evaluate if a data set represents a function? • How can we use a set of data to determine trends and relationships? 	<ul style="list-style-type: none"> • What does determining the slope from multiple representations (graph, table, data set, or real world application) allow us to achieve? • How would you compare and contrast slope, constant of variation, and unit rate? • What is the best way to use a function to determine the value of specific data points using multiple representations? • How is a function affected when you move a graph vertically or horizontally? • Why is the linear parent function important, and how can it be represented? 	<ul style="list-style-type: none"> • How do you describe the slope of a line? • How do you use the slope and y-intercept to make a graph of a linear function? • What do the intercepts tell us, and how do you find the intercepts in the graph and the table and from an equation? • How do changes in the equation change the graph? • When is graphing an inequality useful and what does it allow us to show?

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Assessments	<ul style="list-style-type: none"> • Pre-test Basic Skills • Dana Center Assessment “Mosaic” pg 25-28 (Quiz) • Dana Center Assessment “Stuffed Animals” pg 195-199 • Function Quiz • Unit One & Two cumulative assessment • Student presentations 	<ul style="list-style-type: none"> • District Formative Assessment • Quiz proportions & direct variation • “Walk this Way” Assessment (Algebra I 2000 & beyond pg 95-97) • Dana Center Assessment “600 Meter Race” pg 29-31 • Quiz Slope • Quiz Solving Equations • 12 week cumulative assessment 	<ul style="list-style-type: none"> • District Formative Assessment • Graphing Quiz • Cumulative assessment • Dana Center Assessment “Analysis of a Function” pg 209-212 • Final Exam
Activities (Required) (including literacy, writing prompts, & cross curricular)	<ul style="list-style-type: none"> • “Crossing the River” • “Postage Stamp” • Algebra I 2000 & beyond Pg 1-13 • “Stretching Sequences” • Algebra I 2000 & beyond Pg 24 • Algebra I 2000 & beyond Pg 36-40 • 61 Cooperative Learning Activities Pg 19-20 • Algebra I 2000 & beyond pg 119-131 • McDougal Littell sections 1.6 & 1.7(include calculator activity and extension) • Function Notes and worksheets #1-3 	<ul style="list-style-type: none"> • McDougal Littell Sections 3.6, 3.7, 4.6 (Proportions and Direct Variation) • Algebra I 2000 & beyond pg 82-94 • Algebra I 2000 & beyond pg 153-162 • Group Constant Rate of Change worksheet • “What’s my rule” notes and worksheet • Teacher Generated Geogebra Activities • Notes and Worksheet “Slope as a rate of change” • Notes and Worksheet “Slope as formula” • Solving equations using algebra tiles • Solving equations using graphing calculator 	<ul style="list-style-type: none"> • Graphing Worksheet • Algebra I 2000 & Beyond pg 196-205 • Graphing Vertical & Horizontal Worksheet • Egg Drop • Algebra I 2000 & Beyond pg 351-362 • McDougal Littell Section 6.7 (Graphing Linear Inequalities) • McDougal Littell Section 5.2 • Dana Center Assessment: “Motion Detector” pg. 111 • Dana Center Assessment: “Speeding Cars” pg. 117

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Technology (Optional)	Calculator Elmo netTrekker United Streaming Brain Pop Geogebra CBR	Calculator Elmo netTrekker United Streaming Brain Pop Geogebra CBR	Calculator Elmo netTrekker United Streaming Brain Pop Geogebra CBR