2019-2020 8TH GRADE MATH Hilsman – 3rd Quarter at a Glance

Teacher(s):	Ward, Martin, Naughton, Pratt, McCance, Scott		
Content Area:	Math	Grade Level:	8

Macro Calendar:

January 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 1	6 Eureka 6.1	7 Eureka 6.2	8 Eureka 6.3	9 Eureka 6.4	10 Eureka 6.5
Week 2	13 Formative Check-Up Day	14 Open Up 3.14	15 Open Up 5.8	16 Open Up 5.9	17 Open Up 5.10
Week 3	20 NO SCHOOL!	21 Formative Check-Up Day	22 FAL Day 1	23 FAL Day 2	24 Open Up 6.1
Week 4	27 Open Up 6.2	28 Open Up 6.3	29 Open Up 6.4	30 Open Up 6.5	31 Open Up 6.6

February 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 5	3 Open Up 6.7	4 Open Up 6.8	5 Open Up 6.9	6 Open Up 6.10	7 Unit 5 Review
Week 6	10 Unit 5 UPA	11 BUFFER	12 BUFFER	13 Open Up 4.10	14 Open Up 4.11
Week 7	17 Building Professional Learning	18	19	20	21

		Open Up 4.12	Open Up 4.13	Open Up 4.14	Open Up 4.15
Week 8	24 Solving systems practice day	25 Open Up 4.16	26 Unit 6 Review	27 Unit 6 UPA	28 BUFFER

March 2020

	Monday	Tuesday	Wednesday	Thursday	Friday
Week 9	2 CMP3 BPW 1.1	3 CMP3 BPW 1.2	4 ½ Day: Parent–Teacher Conferences	5 Parent–Teacher Conferences: No students!	6 NO SCHOOL!

Weekly Collaborative Plans

Week 1 January 6–10	
EQ's	Monday: How can I construct a function to model a linear relationship between two quantities? Tuesday: How can I construct a function to model a linear relationship between two quantities? Wednesday: How can I construct a function to model a linear relationship between two quantities? Thursday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph? Friday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph?
Standards:	MGSE8.F.4 **CONSTRUCT** a function to model a linear relationship between two quantities. **DETERMINE** the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a value of a linear function in terms of the situation it models, and in terms of its graph or a table of values. MGSE8.SP.3 **USE** the equation of a linear model to solve problems in the context of bivariate measurement data, **INTERPRETING** the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height. MGSE8.F.5 **Describe qualitatively** the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). **Sketch** a graph that exhibits the qualitative features of a function that has been described verbally. **Investigate** patterns of association in bivariate data.
Success Criteria:	Monday: I can describe and recognize linear functions and models.

	Tuesday: I can interpret the rate of change and initial value of a linear relationship. Wednesday: I can graph and interpret linear functions. Thursday: I can describe the functional relationship between two quantities by looking at a graph. Friday: I can describe the functional relationship between two quantities by looking at a graph.				
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Bellringer	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards
Opening (Strategies)	Students will analyze a real-world situation and represent it with a function	Students will revisit a problem from yesterday's investigation, interpreting the rate of change and initial value in a real-world problem	Students will discuss the pricing model for renting a UHaul truck	Students will learn that positive slopes are increasing functions, negative slopes are decreasing functions, and zero slopes are constant	Students will analyze two functions regarding a runner's speed over time
Transition to Work Session	Students will determine whether the function is linear and how to prove it	Students will discuss and determine with the variables in the linear equation represent	Students will use UHaul's pricing model to graph the function and create a linear equation	Students will look at various graphs and analyze where the graph is increasing, decreasing, and/or constant	Students will determine which of the two functions is linear, and why
WICOR strategy (Strategies)	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques
Work Session	Eureka Module 6 Lesson 1 Students will work together to complete the investigation	Eureka Module 6 Lesson 2 Students will work together to complete the investigation	Eureka Module 6 Lesson 3 Students will work together to complete the investigation	Eureka Module 6 Lesson 4 Students will work together to complete the investigation	Eureka Module 6 Lesson 5 Students will work together to complete the investigation
Personalization/ Differentiation	Students may use their FNT notes to help them solve problems	Students may use their FNT notes to help them solve problems	Students may use their FNT notes to help them solve problems	Students may use their FNT notes to help them solve problems	Students may use their FNT notes to help them solve problems

	Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks
Summary/ Assessment ([Strategies](#))	TICKET OUT THE DOOR: Students will write an equation for a linear function described as a real-world situation	Students will practice comparing the properties of linear functions by examining the value of Pokemon cards over time	VOCAB TIC-TAC-TOE! Students will select three vocabulary terms and use them coherently together in a sentence	Class discussion going over the Extension problem from the investigation	Class discussion going over the work session, interpreting rate of change and initial value in context
Homework (optional)					
Additional Resources for students & parents					

Week 2
January 13-17

EQ's	Monday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph? Tuesday: How can I construct a function to model a linear relationship between two quantities? Wednesday: How can I construct a function to model a linear relationship between two quantities? Thursday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph? Friday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph?
Standards:	MGSE8.F.4 **CONSTRUCT** a function to model a linear relationship between two quantities. **DETERMINE** the rate of change and initial value of the function from a description of a relationship or from two (*x, y*) values, including reading these from a table or from a value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

		MGSE8.F.5 **Describe qualitatively** <u>the functional relationship between two quantities</u> by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). **Sketch** <u>a graph that exhibits the qualitative features of a function that has been described verbally</u>. **Investigate** <u>patterns of association in bivariate data</u>.				
Success Criteria:		Monday: I can explain how the graph of a linear function relates to its rate of change and initial value. Tuesday: I can write linear equations to reason about real-world problems. Wednesday: I can use data points to model a linear function. Thursday: I can interpret the rate of change and initial value of a linear relationship. Friday: I can interpret the rate of change and initial value of a linear relationship.				
		Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Bellringer		Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards
Opening (Strategies)		Students will look at a graph of several lines, pick one, and interpret it in context	Students will unpack the day's standard and go over the learning target	Open Up 5.9 Students will make predictions based on a linear function real world scenario	Students will unpack the day's standard and go over the learning target	Students will discuss an upcoming field trip opportunity to the National Memorial for Peace and Justice in Montgomery, Alabama
Transition to Work Session		Students will try describing their context to their classmates and have them guess the line they picked	Students will, given three graphs, order them from least to greatest in terms of both slope and y-intercept	Open Up 5.9 Students will make predictions based on a linear function real world scenario – students will then determine if the scenario is actually linear	Students will discuss the topics and concepts that will be on tomorrow's quiz	Students will unpack the day's standard and go over the learning target
WICOR strategy (Strategies)		Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	N/A
Work Session		Open Up 3.14 Students will work	Open Up 5.8 Students will work	Open Up 5.9/5.10 Students will work	Kahoot! to review for the following day's quiz	Unit 5 Formative Check-Up

	together on the investigation	together on the investigation	together on the investigation		Students will work on their quiz
Personalization/ Differentiation	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks
Summary/ Assessment ([Strategies](#))	Students will list ways in which we can tell whether a linear pair is a solution to an equation	Students will match a story with its graph	5-Question Check-Up	Previewing next week's and the following week's topics	Students will have the remainder of the period to complete their quiz IF TIME ALLOWS: Students will watch MLK's *I Have A Dream* speech as MLK Day approaches!
Homework (optional)	STUDY!	STUDY!	STUDY!	STUDY!	STUDY!
Additional Resources for students & parents					

Week 3
January 20-24

EQ's	Monday: No school! Tuesday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph? Wednesday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph? Thursday: How can I describe qualitatively the functional relationship between two quantities by analyzing a graph?

		Friday: How I construct and interpret scatter plots for bivariate measurement data?			

Standards:	● MGSE8.F.5 **Describe qualitatively** <u>the functional relationship between two quantities</u> by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear). **Sketch** <u>a graph that exhibits the qualitative features of a function that has been described verbally</u>. **Investigate** <u>patterns of association in bivariate data</u>. ● MGSE8.SP.1 **CONSTRUCT** and **INTERPRET** <u>scatter plots for bivariate measurement data to</u> **INVESTIGATE** <u>patterns of association between two quantities</u>. **DESCRIBE** <u>patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association</u>.

Success Criteria:	Monday: No school! Tuesday: I can interpret distance-time graphs. Wednesday: I can interpret distance-time graphs. Thursday: I can draw graphs to represent the relationship between two quantities. Friday: I can construct a scatter plot.

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Bellringer	NO SCHOOL!	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards
Opening ([Strategies](#))		Students will match a given graph with its scenario	Students will finish their FAL poster from yesterday	Students will discuss the various features of a blank graph (title, axes, etc.)	Students will take down "Scatter Plot" on their new Unit 5 Vocabulary TIP Chart
Transition to Work Session		Students will analyze the graph in detail, breaking it down by section and addressing common misconceptions	Students will be given instructions on how to log into Desmos and how to play the "Guess My Graph" activity	Students will watch a video and practice graphing what is happening in the video, given 2 variables	Students will, as a class, guess the ages of various celebrities and then check how accurate their estimates were
WICOR strategy ([Strategies](#))		Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques
Work Session		FAL: Interpreting Distance vs. Time Graphs	Desmos Investigation	Graphing Stories	Intro to Scatter Plots: Guess the Celebrity Age

		Students will work together on the investigation matching distance–time graphs with their stories	Students will log into Desmos and complete an activity that will match them up digitally with classmates, who must guess a graph that they have picked based on its defining features	Students will, as a class, continue to graph more "stories"	Students will construct a scatter plot graphing their estimated ages vs. the actual ages
Personalization/ Differentiation		<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks
Summary/ Assessment ([Strategies](#))		TICKET OUT THE DOOR: Students will write a story that could match a given graph	TICKET OUT THE DOOR: Students will sketch a graph for a given story	Students will sketch the graph of a custom-made Hilsman video!	Class discussion analyzing our scatter plots
Homework (optional)		STUDY!	STUDY!	STUDY!	STUDY!
Additional Resources for students & parents					

Week 4 **January 27–31**	

| EQ's | Monday: How can I construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities?
Tuesday: N/A
Wednesday: How can I construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between |

	two quantities? Thursday: How can I construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities? Friday: How can I construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities?	
Standards:	● MGSE8.SP.1 **CONSTRUCT** and **INTERPRET** scatter plots for bivariate measurement data to **INVESTIGATE** patterns of association between two quantities. **DESCRIBE** patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association. ● MGSE8.SP.2 **Know** that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	
Success Criteria:	Monday: I can understand how to use a scatter plot. Tuesday: N/A Wednesday: I can use scatter plots to analyze bivariate data. Thursday: I can use scatter plots to analyze bivariate data. Friday: I can use scatter plots to analyze bivariate data.	

	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	*Naughton/Ward/Martin out*	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards
Opening (Strategies)	Students will watch a "Sports Science" video about athletes and their wingspans		Students will discuss the day's learning target and pacing for the remainder of the week	Scatter Plots Mini-Quiz Take 1, Take 2, Take 3	Students will review their Unit 5 TIP Charts
Transition to Work Session	Students will measure their own wingspans, heights, and handspans, and then plot their data on a class scatter plot		Students will use focused note-taking to complete their Unit 5 TIP Charts Students will launch the CMP3 investigation about the relationship between age and speed by watching a clip of Usain Bolt	Students will revisit yesterday's investigation	Students will begin their Scatter Plots Quiz in Illuminate
WICOR strategy (Strategies)	Investigations		FNT	Investigations	N/A

	Group activities & projects Skilled questioning techniques		Investigations Group activities & projects Skilled questioning techniques	Group activities & projects Skilled questioning techniques	
Work Session	CMP3 Thinking With Mathematical Models 4.1 Students will analyze our class scatter plot by answering questions about the relationships that it shows	Students will complete a Unit 5 Pictionary assignment	CMP3 Thinking With Mathematical Models 4.2 (Day 1) Students will work together to complete the investigation on scatter plots	CMP3 Thinking With Mathematical Models 4.2 (Day 2) Students will work together to complete the investigation on scatter plots	Scatter Plots quiz in Illuminate Students will work on their Scatter Plots Quiz
Personalization/ Differentiation	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks		<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks
Summary/ Assessment (Strategies)	Class discussion analyzing our scatter plots		Scatter Plots Mini-Quiz Take 1, Take 2, Take 3	Scatter Plots Mini-Quiz Take 1, Take 2, Take 3	Students will have the remainder of the period to complete their Scatter Plots Quiz
Homework (optional)	STUDY!	STUDY!	STUDY!	STUDY!	
Additional Resources for students & parents					

Week 5
February 3-7

EQ's	Monday: How can I construct and interpret a two-way table? Tuesday: How can I construct and interpret a two-way table? Wednesday: How can I use linear models and tables to solve problems? Thursday: How can I use linear models and tables to solve problems? Friday: How can I use linear models and tables to solve problems?

Standards:	• MGSE8.F.4 **CONSTRUCT** a function to model a linear relationship between two quantities. **DETERMINE** the rate of change and initial value of the function from a description of a relationship or from two (*x, y*) values, including reading these from a table or from a value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.
	
	• MGSE8.SP.1 **CONSTRUCT** and **INTERPRET** scatter plots for bivariate measurement data to **INVESTIGATE** patterns of association between two quantities. **DESCRIBE** patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.
	
	• MGSE8.SP.3 **USE** the equation of a linear model to solve problems in the context of bivariate measurement data, **INTERPRETING** the slope and intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.
	
	• MGSE8.SP.4 **Understand** that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table.
	    ○ a. **Construct** and **interpret** a two-way table summarizing data on two categorical variables collected from the same subjects.
	    ○ b. **Use** relative frequencies calculated for rows or columns to **describe** possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?

Success Criteria:	Monday: I can analyze a two-way table. Tuesday: I can analyze a two-way table. Wednesday: I can use linear models and tables to solve problems. Thursday: I can use linear models and tables to solve problems. Friday: I can use linear models and tables to solve problems.

	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards

Opening (Strategies)	Students will watch a video about a famous roller coaster to set the context for the lesson's investigation	Students will discuss the day's learning target and unpack the standard	Students will discuss expectations for the upcoming Unit 5 Test	Students will discuss expectations for the upcoming Unit 5 Test	Students will begin the Unit 5 UPA
Transition to Work Session	Students will preview a two-way table and make observations based on the data	Students will analyze a two-way table	Students will do a quick write analyzing a scatter plot	Students will go over problems from the Unit 5 Study Guide	Students will continue to work on their Unit 5 UPA
WICOR strategy (Strategies)	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	N/A
Work Session	CMP3 Thinking With Mathematical Models 5.1 Students will work together to analyze two-way tables	Two-Way Tables Day 2 Students will practice completing and analyzing two-way frequency tables	Unit 5 Review Students will work together on their Unit 5 Study Guides	Unit 5 Review Kahoot! to review Unit 5 topics	Unit 5 UPA Students will work on their Unit 5 UPA
Personalization/ Differentiation	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Testing accommodations per IEPs/504s
Summary/ Assessment (Strategies)	Students will determine whether statements about a two-way table are true or false	Students will go over problems from the work session	Students will go over problems from the study guide	Students will go over problems from the Unit 5 Study Guide	Students will have the remainder of the period to complete their Unit 5 UPA

Homework (optional)	STUDY!	STUDY!	STUDY!	STUDY!	
Additional Resources for students & parents					

Week 6
February 10–14

EQ's	Monday: How can I solve real-world and mathematical problems leading to two linear equations in two variables? Tuesday: How can I solve real-world and mathematical problems leading to two linear equations in two variables? Wednesday: How can I solve real-world and mathematical problems leading to two linear equations in two variables? Thursday: How can i understand that solutions to a system of two linear equations correspond to points of intersection of their graphs? Friday: How can i understand that solutions to a system of two linear equations correspond to points of intersection of their graphs?
Standards:	MGSE8.EE.8 **Analyze** and **solve** pairs of simultaneous linear equations (systems of linear equations). MGSE8.EE.8a **Understand** that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. MGSE8.EE.8b **Solve** systems of two linear equations in two variables algebraically, and **estimate** solutions by graphing the equations. **Solve** simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6. MGSE8.EE.8c **SOLVE** real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.
Success Criteria:	Monday: I can create an equation with two or more unknown variables. Tuesday: I can solve linear equations with two unknown variables. Wednesday: I can convert equations from standard form into slope intercept form. Thursday: I can find solutions to systems of equations by using a graph. Friday: I can find solutions to systems of equations by using a graph.

	*Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	*McCance begins his 10-day unit plan in Naughton's classes*	Students will solve problems reviewing old standards, practicing current standards, and	Students will solve problems reviewing old standards, practicing current standards, and	Students will solve problems reviewing old standards, practicing current standards, and	Students will solve problems reviewing old standards, practicing current standards, and

	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	previewing future standards	previewing future standards	previewing future standards	previewing future standards
Opening	As a class, students will create a linear equation in two variables to represent a situation	Students will write an equation to represent the total profit of concession sales at a basketball game	Students will learn about and define the standard form for linear equations	Students will define a system of equations	Students review how to solve a system of equations graphically
Transition to Work Session	Individually, students will create a linear equation in two variables to represent a situation	Students will practice substituting values into linear equations	Students will do an example along with the teacher of how to convert equations from standard form to slope–intercept form	Students will learn how to tell from a graph how many solutions there are to a system of equations	Students will note the differences between graphs of systems of equations with one, infinite, and no solutions
WICOR strategy	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques
Work Session	Students will work together to practice writing and solving linear equations in multiple variables	Students will work together to practice writing and solving linear equations in two variables	Students will practice converting equations from standard form to slope–intercept form	Students will work together to practice using graphs to solve systems of equations	Students will work together to practice using graphs to solve systems of equations
Personalization/ Differentiation	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	<u>Students may use their FNT notes to help them solve problems</u> Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks

Summary/ Assessment (Strategies)	Class discussion on strategies used to write equations to represent unknown values	TICKET OUT THE DOOR: Students will write a linear equation for a given scenario	TICKET OUT THE DOOR: Students will pick from a list of equations which ones are written in standard form	TICKET OUT THE DOOR: Students will use a graph to solve a system of equations	Students will play a round of GimKit to practice solving systems of equations using graphs
Homework (optional)					
Additional Resources for students & parents					

Week 7
February 17–21

EQ's	Monday: Building Professional Learning Day Tuesday: How can I solve systems of two linear equations in two variables algebraically? Wednesday: How can I solve systems of two linear equations in two variables algebraically? Thursday: How can I solve systems of two linear equations in two variables algebraically? Friday: How can I solve systems of two linear equations in two variables algebraically?
Standards:	MGSE8.EE.8 **Analyze** and **solve** pairs of simultaneous linear equations (systems of linear equations). MGSE8.EE.8a **Understand** that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously. MGSE8.EE.8b **Solve** systems of two linear equations in two variables algebraically, and **estimate** solutions by graphing the equations. **Solve** simple cases by inspection. For example, $3x + 2y = 5$ and $3x + 2y = 6$ have no solution because $3x + 2y$ cannot simultaneously be 5 and 6. MGSE8.EE.8c **SOLVE** real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.
Success Criteria:	Monday: Building Professional Learning Day Tuesday: I can solve a system of equations by using the substitution method. Wednesday: I can solve a system of equations by using the substitution method. Thursday: I can solve a system of equations by using the elimination method. Friday: I can solve a system of equations by using the elimination method.

	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	Building Professional Learning Day!	*McCance continuing his 10-day unit plan* *The plans this week are for 5th/7th period classes – 1st/2nd periods are a day behind* Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards
Opening (Strategies)		Students will learn how to use the substitution method to solve a system of equations	Students will review the steps to the substitution method	Students will use pictures to solve a system of equations, informally using the elimination method	Students will review how to use the elimination method
Transition to Work Session		Students will take notes to practice the substitution method	Students will use the substitution method to solve a system of a equations	Students will learn how to formally use the elimination method to solve a system of equations	Students will solve a word problem requiring them to create and solve a system of equations
WICOR strategy (Strategies)		Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques
Work Session		Substitution Day 1 Students will work together to practice solving systems of equations using the substitution method	Substitution Day 2 Students will work together to practice solving systems of equations using the substitution method	Elimination Day 1 Students will work together to practice solving systems of equations using the elimination method	Elimination Day 2 Students will use bow ties to work together to practice solving systems of equations using the elimination method
Personalization/		Students may use their	Students may use their	Students may use their	Students may use their

| Differentiation | | FNT notes to help them solve problems

Students may use calculators

Number lines taped to desks

List of perfect squares & square roots taped to desks | FNT notes to help them solve problems

Students may use calculators

Number lines taped to desks

List of perfect squares & square roots taped to desks | FNT notes to help them solve problems

Students may use calculators

Number lines taped to desks

List of perfect squares & square roots taped to desks | FNT notes to help them solve problems

Students may use calculators

Number lines taped to desks

List of perfect squares & square roots taped to desks |
|---|---|---|---|---|---|
| Summary/ Assessment (Strategies) | | Students will describe how to use the substitution method | Students will solve a word problem requiring the use of the substitution method | Students will solve a system of equations using the elimination method | Students will describe how to use the elimination method |
| Homework (optional) | | | | | |
| Additional Resources for students & parents | | | | | |

Week 8
February 24–28

| EQ's | Monday: How can I solve real-world and mathematical problems leading to two linear equations in two variables?
Tuesday: How can I solve real-world and mathematical problems leading to two linear equations in two variables?
Wednesday: How can I solve real-world and mathematical problems leading to two linear equations in two variables?
Thursday: How can I solve real-world and mathematical problems leading to two linear equations in two variables?
Friday: How can I solve real-world and mathematical problems leading to two linear equations in two variables? |
|---|---|
| Standards: | MGSE8.EE.8c **SOLVE** real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair. |
| Success Criteria: | Monday: I can solve a system of equations by using the elimination method.
Tuesday: I can solve systems of equations.
Wednesday: I can solve systems of equations.
Thursday: I can solve systems of equations.
Friday: I can solve systems of equations. |

	Monday	Tuesday	Wednesday	Thursday	Friday
Bellringer	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will review their Unit 6 Study Guide
Opening (Strategies)	Students will create a system of equations from a word problem	Students will review the three methods for solving systems of equations	Students will review the three methods for solving systems of equations	Students will receive reminders about important upcoming deadlines and due dates	Students will begin their Unit 6 UPA
Transition to Work Session	Students will learn how to use the elimination method when coefficients do not immediately match up	Students will be introduced to the Unit 6 Learning Menu project	Students will review the Unit 6 Learning Menu project requirements and expectations	Students will play Kahoot to review Unit 6 material	Students will work on their their Unit 6 UPA
WICOR strategy (Strategies)	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	N/A
Work Session	Elimination Day 2 Students will work together on mini whiteboards to practice solving systems of equations using the elimination method	Learning Menu Students will work on their Unit 6 Learning Menus	Learning Menu Students will work on their Unit 6 Learning Menus	Unit 6 Review Students will work on their Unit 6 Study Guides in order to prepare for their Unit 6 Test	Unit 6 UPA Students will work on their their Unit 6 UPA
Personalization/ Differentiation	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks	Testing accommodations per IEPs/504s

	List of perfect squares & square roots taped to desks	List of perfect squares & square roots taped to desks	List of perfect squares & square roots taped to desks	List of perfect squares & square roots taped to desks	
Summary/ Assessment ([Strategies](#))	Students will review the steps for the elimination method	Students will make a note of their progress and set a goal for what they need to do in order to complete their Unit 6 Learning Menu the following day	Students will make a note of their progress and set a goal for what they need to do in order to complete their Unit 6 Learning Menu the following day	Students will go over selected problems from the Unit 6 Study Guide	Students will have the remainder of the period to complete their Unit 6 UPA
Homework (optional)	STUDY!	Unit 6 Learning Menu due Friday STUDY!	Unit 6 Learning Menu due Friday STUDY!	Unit 6 Learning Menu due Friday STUDY!	
Additional Resources for students & parents					

Week 9
March 2-6

EQ's	Monday: Tuesday: Wednesday: Thursday: Parent-Teacher Conferences: No students! Friday: NO SCHOOL!
Standards:	
Success Criteria:	Monday: Tuesday: Wednesday: Thursday: No students Friday:NO SCHOOL!

	Monday	Tuesday	Wednesday	Thursday	Friday

Bellringer	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	Students will solve problems reviewing old standards, practicing current standards, and previewing future standards	No students– Parent–Teacher Conferences	NO School!
Opening (Strategies)					
Transition to Work Session					
WICOR strategy (Strategies)	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques	Investigations Group activities & projects Skilled questioning techniques		
Work Session					
Personalization/ Differentiation	Testing accommodations per IEPs/504s	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks	Students may use their FNT notes to help them solve problems Students may use calculators Number lines taped to desks List of perfect squares & square roots taped to desks		
Summary/ Assessment (Strategies)					
Homework (optional)					
Additional Resources for					

students & parents					