



Community Schools Gr	rade Level: 7	7 Subject: Math		
Topic #: 1 Rational Number Op	erations	Duration: 28 days		
Standard(s)	Envision Lesson	Objective	Vocabulary	Materials
7.C.1 Understand $p + q$ as the number located a distance $ q $ from p, in the positive or negative direction, depending on whether q is positive or negative. Show on a number line that a number and its opposite have a sum of 0 (are additive inverses). Find and interpret sums of rational numbers in real-world contexts.	1-1: Relate Integers and Their Opposites	SWBAT understand how integers and their opposites are related	 Absolute Value Opposites Integers Negative Positive 	 Number Lines Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Number Line Distance from Zero Absolute Zero Card Game Story Problems Board Problems Review
 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 	1-2: Understand Rational Numbers	SWBAT identify rational numbers and write them in decimal form.	 repeating decimal terminating decimal Bar notation 	 Teach a Partner Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review



Community Schoots	rade Level: '	7 Subject: Math	1	Critical (1/3) Moderate (0/2) Low (0/1)
				 Small Group: Board Work No Calculator Fraction to Decimal Decimal to Fraction Story Problems Board Problems
 7.C.1 Understand p + q as the number located a distance q from p, in the positive or negative direction, depending on whether q is positive or negative. Show on a number line that a number and its opposite have a sum of 0 (are additive inverses). Find and interpret sums of rational numbers in real-world contexts. 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 	1-3: Add Integers	 SWBAT Add positive and negative integers. Model integer addition in real-life applications. 	• additive inverse	 Board Problems Review Board Problems Computer Fluency Number Line Red/Yellow Tiles Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
7.C.8 Solve real-world problems with rational numbers by using one or two operations.				 Small Group: Hands-on Activities Story Problems Board Problems Review

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WA-NEE Community Schools G1	rade Level: 7	7 Subject: Math	l	
 7.C.2 Understand subtraction of rational numbers as adding the additive inverse, p 2 q = p + (2q). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 	1-4: Subtract Integers	SWBAT understand subtraction of integers as adding the additive inverse, $p-q=p+(-q)$.	• Adding the Opposite	 Marcy Cook Up and Down Tiles Puzzle Boards Yellow/Red Tiles Music Video Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Number Cards Hands-On manipulating problems Story Problems Board Problems Review
7.C.1 Understand $p + q$ as the number located a distance $ q $ from p, in the positive or negative direction, depending on whether q is positive or negative. Show on a number line that a number and its opposite have a sum of 0 (are additive inverses). Find and interpret sums of rational numbers in real-world contexts.	1-5: Add and Subtract Rational Numbers	SWBAT Use properties of operations to add and subtract rational numbers.		 Up and Down Tiles Grudge Review 99Math Textbook Worksheet SuccessMaker

Community Schools	rade Level: 7	7 Subject: Math	Critical (1/3) Moderate (0/2 Low (0/1))
 7.C.2 Understand subtraction of rational numbers as adding the additive inverse, p 2 q = p + (2q). Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 			 Quizziz, Giml Kahoot!, Bloo or other online review Small Group: Integer War Stacks Tile Puzzles (Frac-Add) Story Problem Board Probler Review 	kit, ket, e ns
 7.C.3 Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (21)(21) = 1 and the rules for multiplying signed numbers 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 	1-6: Multiply Integers	 SWBAT multiply positive and negative integers. apply integer multiplication to real-life applications. 	 PBS Video Triangle Board Probler Textbook Worksheet SuccessMaker Quizziz, Giml Kahoot!, Bloo or other online review Small Group: Stacks 	ns kit, ket, e





Community Schools G	rade Level: 7	7 Subject: Math		
			 Board Prowith and voice with and voice manipulat Story Prob Board Prob Review 	oblems w/o ives blems oblems
7.C.3 Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (21)(21) = 1 and the rules for multiplying signed numbers	1-7: Multiply Rational Numbers	SWBAT find the product of rational numbers	 Textbook Workshee SuccessMe Quizziz, C Kahoot!, I or other o review 	et aker Gimkit, Blooket, mline
 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 			 Small Group: Story Pro Board Pro Review Story Prol Board Pro Board Pro Review 	oblems oblems oblems oblems
7.C.4 Understand that integers can be divided, provided that the divisor is not zero. Understand that if p and q are integers, then $2(pq) = (-p)q = p(-q)$.	1-8: Divide Integers	 SWBAT Understand how to divide integers by applying the rules of multiplying integers. Determine equivalencies among integer quotients. 	 Textbook Workshee SuccessMa Quizziz, C Kahoot!, I or other o review 	et aker Gimkit, Blooket, online

WA-NEE Community Schools	rade Level: 7	7 Subject: Math	l	<mark>Critical (1/3)</mark> Moderate (0/2) Low (0/1)
 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 				 Task Cards War – Card game Yahtzee Project Small Group: Story Problems Board Problems Review Story Problems Board Problems Board Problems Review
 7.C.4 Understand that integers can be divided, provided that the divisor is not zero. Understand that if p and q are integers, then 2(pq) = (-p)q = p(-q). 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 	1-9: Divide Rational Numbers	SWBAT understand how the signs of integers in a multiplication sentence relate to the signs in a related division statement.	 complex fraction multiplicativ e inverse 	 99Math Music Video Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review

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WA-NEE Community Schools	rade Level: '	7 Subject: Math	
 7.C.7 Compute fluently with rational numbers using an algorithmic approach. 7.C.8 Solve real-world problems with rational numbers by using one or two operations. 	1-10: Solve Problems with Rational Numbers	 SWBAT Decide which operations to use to solve problems. Use precision when solving problems with rational numbers. 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Posters CueThink Graphic Organizers Small Group: Story Problems Board Problems Review
7.C.1 Understand $p + q$ as the number located a distance $ q $ from p, in the positive or negative direction, depending on whether q is positive or negative. Show on a number line that a number and its opposite have a sum of 0 (are additive inverses). Find and interpret sums of rational numbers in real-world contexts. 7.C.2 Understand subtraction of rational numbers as adding the additive inverse, p 2 q = p + (2q). Show that the distance between two rational	3-Act Mathematical Modeling: Win Some, Lose Some (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropri ateness of their math models 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review





Community Schools G	rade Level: 7	7 Subject: Math	ı	
numbers on the number line is the				
absolute value of their difference, and				
apply this principle in real-world				
contexts.				
7.C.5 Understand that multiplication is				
numbers by requiring that operations				
continue to satisfy the properties of				
operations, particularly the distributive				
property, leading to products such as				
(21)(21) = 1 and the rules for				
multiplying signed numbers				
7.C.4 Understand that integers can be				
divided, provided that the divisor is				
not zero. Understand that if p and q				
are integers, then $2(pq) - (-p)q - p(-q)$				
ч <i>у</i> .				
7.C.7 Compute fluently with rational				
numbers using an algorithmic				
approach.				
7.C.8 Solve real-world problems with				
rational numbers by using one or two				
operations.	DIA D'			
7.NS.I Find the prime factorization of	IN-1: Prime	SWBAT	Prime	 Textbook
whole numbers and write the results	Factorization	• tind the prime factorization	Numbers	 Worksheet
using exponents.		of a whole number.	• Factors	 SuccessMaker
		• use prime factorization to	 Exponents 	• Quizziz, Gimkit,
		tinu the greatest common		Kahoot!, Blooket,





Community Schools	Grade Level:	7 Subject: Math	1	
		factor (GCF) and the least common multiple (LCM) of two whole numbers.	Sn	or other online review Tree Diagram Graphic Organizers Number Charts nall Group:
				Story ProblemsBoard ProblemsReview
7.NS.2 Understand the inverse relationship between squaring and finding the square root of a perfect square whole number. Find square roots of perfect square whole numbers.	IN-4: Evaluate Square Roots	SWBAT find square roots of rational numbers.	- Square Root - Perfect Square Square	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Cheez-Its Claculator hall Group: Story Problems Board Problems Review
7.NS.3 Know there are rational and irrational numbers. Identify, compare, and order rational and irrational	IN-2: Understand	SWBAT identify an irrational number.	- Irrational Numbers	TextbookWorksheet

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Community Schools	Grade Level: '	7 Subject: Mat	th	Critical (1/3) Moderate (0/2) Low (0/1)
numbers (e.g. !2, !3, !5, ∏) and plot them on a number line.	Irrational Numbers		 Rational Numbers Imperfect Square PI – 3.14 	 SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Real-Number Venn Diagram Number line All Things Algebra Notes Small Group: Story Problems Board Problems Review
7.NS.3 Know there are rational and irrational numbers. Identify, compare and order rational and irrational numbers (e.g. $!2, !3, !5, \prod$) and plot them on a number line.	IN-3: Compare and Order Real Numbers	SWBAT compare and order rational and irrational numbers.	 Natural Numbers Whole Numbers Integers Rational Irrational 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Number lines Number Cards Graphic Organizers Small Group: Story Problems Board Problems



Grade Level: 7

Subject: Math

• Review

Topic #: 2Analyze and Use Proportional RelationshipsDuration: 16-20 days				
Standard(s)	Envision Lesson	Objective	Vocabulary	Materials
7.C.5 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units.	2-1: Connect Ratios, Rates, and Unit Rates	 SWBAT Use ratios and rates to describe the relationship between two quantities. Find equivalent ratios and use unit rates to solve multi-step problems. 	- Rates - Unit Rates - Ratios -	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Heart Rate Project Desmos Small Group: Story Problems Board Problems Review
7.C.5 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units.	2-2: Determine Unit Rates with Ratios of Fractions	 SWBAT Find unit rates with ratios of fractions. Use unit rates to solve multi-step problems. 	- Complex Fractions	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!,



Gr Gr	ade Level: 7	Subject: Math		Critical (1/3) Moderate (0/2) Low (0/1)
				Blooket, or other online review • Taco Tuesday digital Small Group: • Story Problems • Board Problems • Review
7.AF.6 Decide whether two quantities are in a proportional relationship (e.g.,by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin).	2-3: Understand Proportional Relationships: Equivalent Ratios	SWBAT determine whether quantities are proportional by testing for equivalent ratios.	 proportional relationship, -proportion Equivalent Ratios Origin Cross Product - 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Coordinate Planes Graphic Organizers Small Group: Story Problems Board Problems Review
7.AF.7 Identify the unit rate or constant of proportionality in tables, graphs, equations, and verbal descriptions of proportional relationships.	2-4: Describe Proportional Relationships: Constant of	SWBAT:Use the constant of proportionality to write	• constant of proportion ality (K)	TextbookWorksheetSuccessMaker





Community Schools G	rade Level: 7	Subject: Math		
	Proportionalit y	 equations that represent proportional relationships. Use equations to solve problems involving proportional relationships. 		 Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review
 7.C.5 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. 7.AF.6 Decide whether two quantities are in a proportional relationship (e.g.,by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin). 7.AF.7 Identify the unit rate or constant of proportionality in tables, graphs, equations, and verbal descriptions of proportional relationships. 	A 3- Act Mathematical Modeling: Mixin' it Up (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropriateness of math models. Explain why the results from mathematical models may not align exactly to the problem situation. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review
7.AF.6 Decide whether two quantities are in a proportional relationship (e.g.,by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin).	2-5: Graph Proportional Relationships	 SWBAT Use a graph to recognize proportionality. Identify a constant of proportionality from a graph. 	Coordinate Plane Quadrants Ordered Pairs	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!,





Community Schools	Grade Level: 7	Subject: Math		
 7.AF.7 Identify the unit rate or constant of proportionality in tables, graphs, equations, and verbal descriptions of proportional relationships. 7.AF.8 Explain what the coordinates or proportional relationships. 	t a	• Interpret a point on a graph of a proportional relationship.		Blooket, or other online review Graphic Organizers Coordinate Plane
point on the graph of a proportional relationship mean in terms of the situation, with special attention to the points(0, 0) and (1, r), where r is the un rate.	it		Smal	ll Group: Story Problems
7.AF.9 Represent real-world and other mathematical situations that involve proportional relationships. Write equations and draw graphs to represent these proportional relationships. Recognize that these situations are described by a linear function in the form $y = mx$, where the unit rate, m, is the slope of the line.				Board ProblemsReview
 7.C.5 Compute unit rates associated wiratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units. 7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest tax, markups, markdowns, gratuities, conversions within and across 	h 2-6: Apply Proportional Reasoning to Solve Problems	 SWBAT Explain whether a situation represents a proportional relationship. Use representations to find entry points into problems. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review

				<mark>Critical (1/3)</mark> Moderate (0/2) Low (0/1)
Community Schools Gra	ade Level: 7	Subject: N	Iath	
 measurement systems, and percent increase and decrease). 7.AF.6 Decide whether two quantities are in a proportional relationship (e.g.,by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin). 7.AF.7 Identify the unit rate or constant of proportionality in tables, graphs, equations, and verbal descriptions of proportional relationships 				 Small Group: Story Problems Board Problems Review
7.AF.8 Explain what the coordinates of a point on the graph of a proportional relationship mean in terms of the situation, with special attention to the points(0, 0) and (1, r), where r is the unit rate.				
7.AF.9 Represent real-world and other mathematical situations that involve proportional relationships. Write equations and draw graphs to represent these proportional relationships. Recognize that these situations are described by a linear function in the form $y = mx$, where the unit rate, m, is the slope of the line.				
7.AF.4 Define slope as vertical change for each unit of horizontal change and	IN-5		- Slope (m)	• Textbook

Gra Gra	ade Level: 7	Subject: Math		Critical (1/3) Moderate (0/2) Low (0/1)
recognize that a constant rate of change or constant slope describes a linear function. Identify and describe situations with constant or varying rates of change.			 Rise (change in y value) Run (change in x value) 	 Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Graphic Organizers Geo-Boards Small Group: Story Problems Board Problems Review
 7.AF.5 Graph a line given its slope and a point on the line. Find the slope of a line given its graph. 7.AF.9 Represent real-world and other mathematical situations that involve proportional relationships. Write equations and draw graphs to represent these proportional relationships. Recognize that these situations are described by a linear function in the form y = mx, where the unit rate, m, is the slope of the line. 	IN-6		 Linear equation Direct Variation 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Coordinate Planes Small Group: Story Problems Board Problems Review



Grade Level: 7

Subject: Math

Topic #: 3 Analyze and Solve Perc	ent Problems	Duration: 24 days		
	Envision			
Standard(s)	Lesson	Objective	Vocabulary	Materials
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	3-1: Analyze Percents of Numbers	 SWBAT Understand that equivalent rates can be used to find percents. Analyze percents of numbers in a real-world context. 	-Percent -Part versus Whole	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Graphic Organizers
				Small Group:Story ProblemsBoard ProblemsReview
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	3-2 Connect Percent and Proportion	 SWBAT Construct a percent proportion. Use a percent proportion to find an unknown part, whole, or percent. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
				Small Group:





Community Schools G	rade Level: 7	Subject: Math		
				Story ProblemsBoard ProblemsReview
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	3-3: Represent and Use the Percent Equation	 SWBAT Understand the relationship between proportional reasoning and percent. Interpret the results of a percent equation in a real-life scenario. 	•	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	3-4: Solve Percent Change and Percent Error Problems	 SWBAT Solve real-world problems involving percent change and percent error. Understand the percent equation and the different ways it can be used. 	 percent change percent error 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review

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Community Schools Gr	ade Level: 7	Subject: Math		
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	3-Act Mathematical Modeling: The Smart Shopping (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropriateness of their math models. 	Smal	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review I Group: Story Problems Board Problems Review
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	3-5: Solve Markup and Markdown Problems	 SWBAT Understand and calculate markups and markdowns. Relate percent change to percent markup and percent markdown. 	 markup markdown percent percent markdown Tax Tip Gratuities Smal 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Project – Daisy's Donuts I Group: Story Problems Board Problems Review
7.C.6 Use proportional relationships to solve ratio and percent problems with multiple operations (e.g. simple interest,	3-6: Solve Simple	SWBAT	 interest rate principal 	Textbook Worksheet



				<mark>Critical (1/3)</mark> Moderate (0/2) Low (0/1)
ommunity Schoots	Grade Level: 7	Subject: Math		
tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease).	Interest Problems	 Identify the parts of interest problems and how the values are related. Understand what simple interest is and how it is calculated. 	• simple interest	 SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review

Topic #: 4 Write and Evaluate Algebraic Expressions Duration: 16 days				
	Envision			
Standard(s)	Lesson	Objective	Vocabulary	Materials
7.AF.2 Solve equations of the form $px + q = r$ and $p(x + q) = r$ fluently, where p, q, and r are specific rational numbers. Represent real-world problems using equations of these forms and solve such problems.	4-1: Write and Evaluate Algebraic Expressions	SWBAT understand how variables are used to represent unknown values in problems.	-Evaluate - Simplify -Expressions -Variables	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review

WA-NEE Community Schools

WA-NEE Community Schools	ide Level: 7	Subject: Math		<mark>Critical (1/3)</mark> Moderate (0/2) Low (0/1)
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-2: Generate Equivalent Expressions	 SWBAT Recognize when two expressions are equivalent. Use properties of operations to write equivalent expressions. 	-Associative Property -Commutative Property -Distributive Property -Identity Property -Simplify	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Graphic Organizer for Properties Property Theatre Small Group: Story Problems Board Problems Review
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-3: Simplify Expressions	SWBAT combine like integer and rational terms.	-Like Terms	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Tiles Small Group: Story Problems Board Problems





Community Schools G1	ade Level: 7	Subject: Math		
				• Review
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-4: Expand Expressions	SWBAT use the Distributive Property to expand expressions.	-Distributive Property	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
				 Small Group: Story Problems Board Problems Review
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-5: Factors Expressions	 SWBAT Understand expanding an expression is the reverse of factoring. Identify the GCF of algebraic terms in expressions. 	-Factoring -Factors	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
				Small Group:Story ProblemsBoard ProblemsReview

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Community Schools Gr	ade Level: 7	Subject: Math	
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	3-Act Mathematical Modeling: I've Got You Covered (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropriateness of their math models. Explain why the results from their mathematical models may not align exactly to the problem situation. 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-6: Add Expressions	 SWBAT Use properties of operations to add expressions. Model addition of expressions in real-life applications. 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review



Critical (1/3)
Moderate (0/2)
<mark>Low (0/1)</mark>

Community Schools G.	rade Level: 7	Subject: Math	
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-7: Subtract Expressions	 SWBAT Use properties of operations to subtract expressions. Model subtraction of expressions in real-life applications. 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
			 Small Group: Story Problems Board Problems Review
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression 2(x 2 5)). Justify each step in the process.	4-8: Analyze Equivalent Expressions	SWBAT write equivalent expressions to show how quantities are related in real-life applications.	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
			Small Group: • Story Problems • Board Problems



• Review

Topic #: 5 Solve Problems Using Equations and Inequalities Duration: 14 days				
Standard(s)	Envision Lesson	Objective	Vocabulary	Materials
7.AF.2 Solve equations of the form $px + q = r$ and $p(x + q) = r$ fluently, where p, q, and r are specific rational numbers. Represent real-world problems using equations of these forms and solve such problems.	5-1: Write Two-Step Equations	 SWBAT Analyze word problems to write two-step equations. Understand the relationship between the terms of the equation and the values they represent. 	• Equations	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Operation Word Graphic Organizer
				 Story Problems Board Problems Review
7.AF.2 Solve equations of the form $px + q = r$ and $p(x + q) = r$ fluently, where p, q, and r are specific rational numbers. Represent real-world problems using equations of these forms and solve such problems.	5-2: Solve Two-Step Equations	 SWBAT Use models to solve two- step equations. Compare algebraic and arithmetic solutions. 	isolate the variableequation	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or



Gra Gra	ade Level: 7	Subject: Math		Critical (1/3) Moderate (0/2) Low (0/1)
			S	other online review Mobile Balance and Number Tiles Desmos Partner Passing mall Group: Story Problems Board Problems Review
7.AF.1 Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given2x 2 10, create an equivalent expression $2(x 2 5)$). Justify each step in the process. 7.AF.2 Solve equations of the form px + q = r and p(x + q) = r fluently, where p, q, and r are specific rational numbers. Represent real-world problems using equations of these forms and solve such problems.	5-3: Solve Equations Using the Distributive Property	SWBAT solve equations using the Distributive Property	S	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Partner Check mall Group: Story Problems Board Problems Review

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WA-NEE Community Schools Gra	ade Level: 7	Subject: Math		
7.AF3 Solve inequalities of the form $px + q (> or \ge) r$ or $px + q (< or \le) r$, where p, q, and r are specific rational numbers. Represent real-world problems using inequalities of these forms and solve such problems. Graph the solution set of the inequality and interpret it in the context of the problem.	5-4: Solve Inequalities Using Addition or Subtractions	 SWBAT Graph the solution of inequalities on a number line. Solve inequalities using the Addition and Subtraction Properties of Inequality. 	-Inequalities -Greater than -Less than	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Number Lines Small Group: Story Problems Board Problems Review
7.AF.3 Solve inequalities of the form $px + q$ (> or \geq) r or $px + q$ (< or \leq) r, where p, q, and r are specific rational numbers. Represent real-world problems using inequalities of these forms and solve such problems. Graph the solution set of the inequality and interpret it in the context of the problem.	5-5: Solve Inequalities Using Multiplication or Division	 SWBAT Write inequalities and solve them using Multiplication and Division Properties of Inequality. Graph the solutions of an inequality on a number line. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Task Cards
				Small Group: • Story Problems



Critical (1/3)
<mark>Moderate (0/2)</mark>
Low (0/1)

Community Schools Gra	ade Level: 7	Subject: Math		
			• Bo • Re	ard Problems view
7.AF.3 Solve inequalities of the form $px + q$ (> or \geq) r or $px + q$ (< or \leq) r, where p, q, and r are specific rational numbers. Represent real-world problems using inequalities of these forms and solve such problems. Graph the solution set of the inequality and interpret it in the context of the problem.	3-Act Mathematical Modeling: Digital Downloads (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropriateness of their mathematical models. 	Te Wa Su Qu Kz Bla otl rev	xtbook orksheet ccessMaker iizziz, Gimkit, ihoot!, ooket, or her online view
			Small Gro • Sto • Bo • Re	up: ory Problems oard Problems view
7.AF.3 Solve inequalities of the form $px + q (> or \ge) r$ or $px + q (< or \le) r$, where p, q, and r are specific rational numbers. Represent real-world problems using inequalities of these forms and solve such problems. Graph the solution set of the inequality and interpret it in the context of the problem.	5-6: Solve Two-Step Inequalities	 SWBAT Write and solve a two-step inequality to solve a problem. Solve an inequality by multiplying or dividing by a negative rational number. 	Te Wu Su Qu Ka Blo otl rev	xtbook orksheet ccessMaker uizziz, Gimkit, uhoot!, ooket, or her online view
			Small Gro • Sto	up: ory Problems



Community Schools	Grade Level: 7	Subject: Math	
			Board ProblemsReview
7.AF.3 Solve inequalities of the form $p + q$ (> or \geq) r or px + q (< or \leq) r, where p, q, and r are specific rational numbers. Represent real-world proble using inequalities of these forms and solve such problems. Graph the soluti set of the inequality and interpret it in the context of the problem.	ox 5-7: Solve Multi-Step Inequalities on	 SWBAT Explore the relationship between two-step inequalities and multi-step inequalities. Apply the Distributive Property to simplify and solve multi-step inequalities. 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Around the World Activity
			Small Group: • Story Problems • Board Problems • Review

Topic #: 8 Solve Problems Involvi	ng Geometry	Duration: 27-32 days		
Standard(s)	Envision Lesson	Objective	Vocabulary	Materials
7.AF.7 Identify the unit rate or constant of proportionality in tables, graphs, equations, and verbal descriptions of proportional relationships.	8-1: Solve Problems Involving Scale Drawings	SWBAT use a scale drawing as a representation of actual lengths and area.	• scale drawing	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!,

WA-NEE Community Schools

Community Schools Gr	ade Level: 7	Subject: Math		
7.GM.3 Solve real-world and other mathematical problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing. Create a scale drawing by using proportional reasoning.				Blooket, or other online review Scale Project Small Group: Story Problems Board Problems Review
7.GM.1 Explore triangles with given conditions from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	8-2: Draw Geometric Figures	 SWBAT Explore the relationship between two-step inequalities and multi-step inequalities. Apply the Distributive Property to simplify and solve multi-step inequalities. 	-Unique Triangle	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Straws/Stickes
				Small Group:Story ProblemsBoard ProblemsReview
7.GM.1 Explore triangles with given conditions from three measures of angles or sides, noticing when the	8-3: Draw Triangles with Given Conditions	 SWBAT Construct triangles with given conditions. 		TextbookWorksheetSuccessMaker



angle-angle criterion for similar triangles,

and solve problems involving similarity.



• identify similar polygons.

Worksheet

SuccessMaker

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Community Schools Gra	ade Level: 7	Subject: Math		
		 solve problems by applying their understanding of similar polygons. 	Sm	 Quizziz, Gimkit, Kahoot!, Blooket, or other online review all Group: Story Problems Board Problems Review
7.GM.5 Understand the formulas for area and circumference of a circle and use them to solve real-world and other mathematical problems; give an informal derivation of the relationship between circumference and area of a circle.	8-5: Solve Problems Involving Circumference of a Circle	 SWBAT Calculate the circumference, radius, or diameter of a circle. Recognize the relationship between the circumference and the diameter of a circle and π. 	 Circumfere nce Diameter Radius Center PI Sm 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Manipulatives
				Story ProblemsBoard ProblemsReview
7.GM.5 Understand the formulas for area and circumference of a circle and use them to solve real-world and other mathematical problems; give an informal	8-6: Solve Problems Involving Area of a Circle	 SWBAT Find the area of a circle. Use the area to find the radius and diameter. 		TextbookWorksheetSuccessMaker





Community Schools Gra	ade Level: 7	Subject: Math		
derivation of the relationship between circumference and area of a circle.		• Solve problems involving the area of circle.		 Quizziz, Gimkit, Kahoot!, Blooket, or other online review Circle Project Task Cards
			Sm	all Group:Story ProblemsBoard ProblemsReview
7.GM.5 Understand the formulas for area and circumference of a circle and use them to solve real-world and other mathematical problems; give an informal derivation of the relationship between circumference and area of a circle.	3-Act Mathematical Modeling: Whole Lotta Dough (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropriateness of their mathematical mode ls. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
			Sm	all Group:Story ProblemsBoard ProblemsReview
Eliminate	8-7: Describe Cross Sections	SWBAT	• cross section	TextbookWorksheet





Community Schools G	rade Level: 7	Subject: Math		
		 Describe cross sections of right rectangular prisms and pyramids. Solve problems involving cross sections. 		 SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
			St	nall Group: • Story Problems • Board Problems • Review
7.GM.7 Construct nets for right rectangular prisms and cylinders and use the nets to compute the surface area; apply this technique to solve real-world and other mathematical problems.	8-8: Solve Problems Involving Surface Area	 SWBAT Find the surface area of two-dimensional composite shapes. Find the surface area of three-dimensional composite shapes. 	• composite figure	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Manipulatives Project
			St	nall Group:Story ProblemsBoard ProblemsReview
7.GM.7 Construct nets for right rectangular prisms and cylinders and use	e IN-8	SWBAT draw nets of solid figures and use them to calculate the		TextbookWorksheet

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Critical (1/3)





Community Schools	Grade Level: 7	Subject: Math	
dimensional objects composed of rig rectangular prisms.	ght	• recognize the relationship between the formulas for the volume of a rectangular prism and the volume of a cylinder.	 Quizziz, Gimkit, Kahoot!, Blooket, or other online review
			Small Group:Story ProblemsBoard ProblemsReview

Topic #: 6Use Sampling to Draw Inferences About PopulationsDuration: 8 days					
Standard(s)	Envision Lesson	Objective	Vocabulary	Materials	
7.DSP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population. Understand that conclusions and generalizations about a population from a sample are valid only if the sample is representative of that population and that random sampling tends to produce representative samples and support valid inferences.	6-1: Populations and Samples	 SWBAT Distinguish between a population and a sample. Establish whether a sample is representative of a population. Generate random samples. 	 random sample representative sample 	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Small Group: Story Problems Board Problems Review 	



Community Schools G	rade Level:	7 Subject: Math		
 7.DSP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population. Understand that conclusions and generalizations about a population from a sample are valid only if the sample is representative of that population and that random sampling tends to produce representative samples and support valid inferences. 7.DSP.2 Use data from a random sample to draw inferences about a population. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. 	6-2: Draw Inferences from Data	 SWBAT Make qualitative inferences from a sample data set. Make quantitative inferences from a sample data set. Make estimates about a population based on a sample data set, and assess whether the inferences are valid. 	• valid inference	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Graphs Data Sets Tables Small Group: Story Problems Board Problems Review
 7.DSP.3 Find, use, and interpret measures of center (mean and median) and measures of spread (range, interquartile range, and mean absolute deviation) for numerical data from random samples to draw comparative inferences about two populations. 7.DSP.4 Make observations about the degree of visual overlap of two numerical data distributions represented in line plots or box plots. Describe how data, particularly 	6-3: Make Comparative Inferences About Populations	 SWBAT Use box plots to compare and make inferences about populations. Use the median and IQR of data sets to informally compare and make inferences about two populations. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review Graphic Organizers Small Group: Story Problems

<mark>Critical (1/3)</mark> Moderate (0/2) <mark>Low (0/1)</mark>



Critical (1/3)
<mark>Moderate (0/2)</mark> Low (0/1)

Community Schools	arade Level:	7 Subject: Math		
outliers, added to a data set may affect the mean and/or median.		,	Board Prob.Review	lems
 7.DSP.3 Find, use, and interpret measures of center (mean and median) and measures of spread (range, interquartile range, and mean absolute deviation) for numerical data from random samples to draw comparative inferences about two populations. 7.DSP.4 Make observations about the degree of visual overlap of two numerical data distributions 	6-4: Make More Comparative Inferences About Populations	SWBAT use the mode, range, mean, and mean absolute deviation (MAD)to compare populations.	 Textbook Worksheet SuccessMak Quizziz, Gir Kahoot!, Bloor other onl review Small Group: 	ter mkit, ooket, line
represented in line plots or box plots. Describe how data, particularly outliers, added to a data set may affect the mean and/or median.			 Story Proble Board Proble Review 	ems lems
7.DSP.1 Understand that statistics can be used to gain information about a population by examining a sample of the population. Understand that conclusions and generalizations about a population from a sample are valid only if the sample is representative of that population and that random sampling tends to produce representative samples and support valid inferences.	3-Act Mathematical Modeling: Raising Money (Supplemental)	 SWBAT Use mathematical modeling to represent a problem situation and to propose a solution. Test and verify the appropriateness of their math models. Explain why the results from their mathematical models may not align exactly to the problem situation. 	 Textbook Worksheet SuccessMak Quizziz, Gir Kahoot!, Bloor other onl review Graphs Tables Data Charts Small Group: 	er mkit, ooket, line



Community Schools	Grade Level: 7	Subject: Math	
7.DSP.2 Use data from a random sample to draw inferences about a population. Generate multiple sample (or simulated samples) of the same si to gauge the variation in estimates or predictions.	es ze		Story ProblemsBoard ProblemsReview
7.DSP.3 Find, use, and interpret measures of center (mean and media: and measures of spread (range, interquartile range, and mean absolut deviation) for numerical data from random samples to draw comparative inferences about two populations.	n) e e		
7.DSP.4 Make observations about th degree of visual overlap of two numerical data distributions represented in line plots or box plots Describe how data, particularly outliers, added to a data set may affect the mean and/or median.	e ct		

Topic #: 7 Probability		Duration: 14 days		
	Envision			
Standard(s)	Lesson	Objective	Vocabulary	Materials
7.DSP.5 Understand that the	7-1: Understand	SWBAT	 outcomes 	• Textbook
probability of a chance event is a	Likelihood and	• Use probability to	 probability 	• Worksheet
number between0 and 1 that expresses	Probability	describe to describe the	1 7	 SuccessMaker
the likelihood of the event occurring.		likelihood that an event		Ouizziz Cimbit
Understand that a probability near 0		will occur.		• Quizziz, Gillikit, Kaboot!
indicates an unlikely event, a				Kanooti,
probability around 12 indicates an				

<mark>Critical (1/3)</mark> Moderate (0/2) <mark>Low (0/1)</mark>





Low (0/1)





Low (0/1)





Community Schools	rade Level: 7	Subject: Math		
indicates an unlikely event, a probability around 12 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. Understand that a probability of 1 indicates an event certain to occur and a probability of 0 indicates an event impossible to occur. Identify probabilities of events as impossible, unlikely, equally likely, likely, or certain.		 Use experimental probability to make predictions. Explain differences betwe en theoretical and experimental probability. 		 Quizziz, Gimkit, Kahoot!, Blooket, or other online review Dice Desmos Probablity Project Bracketology
7.DSP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its relative frequency from a large sample.				Small Group:Story ProblemsBoard ProblemsReview
7.DSP.7 Develop probability models that include the sample space and probabilities of outcomes to represent simple events with equally likely outcomes. Predict the approximate relative frequency of the event based on the model. Compare probabilities from the model to observed frequencies; evaluate the level of agreement and explain possible sources of discrepancy.				
7.DSP.5 Understand that the probability of a chance event is a number between0 and 1 that expresses the likelihood of the event occurring.	7-4: Use Probability Models	SWBATDevelop a probability model.	sample spaceprobability model	TextbookWorksheetSuccessMaker

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Community Schools G:	rade Level: 7	Subject: Math		
impossible, unlikely, equally likely, likely, or certain. 7.DSP.6 Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its relative frequency from a large sample. ***Eliminate??***	7-5: Determine Outcomes of Compound Events	SWBAT use a tree diagram, a table, or an organized list to represent the sample space for a compound event.	• compound event	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
				Small Group:Story ProblemsBoard ProblemsReview
Eliminate??	7-6: Find Probabilities of Compound Events	 SWBAT Organize information about a compound event on a table, a tree diagram, or an organized list. Find the probability of a compound event. 		 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review





Community Schools	Grade Level: 7	Subject: Math		
				Small Group: • Story Problems • Board Problems • Review
Eliminate?	7-7: Simulate Compound Events	 SWBAT Use different tools to simulate a compound event. Model a real-world situation involving a compound event and predict its outcome using a simulation. 	• simulation	 Textbook Worksheet SuccessMaker Quizziz, Gimkit, Kahoot!, Blooket, or other online review
				Small Group: • Story Problems • Board Problems • Review