# **Unit 2 Equations and Inequalities**

Content Area: Mathematics
Course(s): Mathematics 6
Time Period: November

Length: 63 Instructional days

Status: **Published** 

### **Unit Overview**

Unit Two includes equations and inequalities encompassing sixty-three days. The main focus is evaluating ratios and proportional relationships, understanding the number system, and evaluating expressions and equations. Mathematical Practices from the box below will be connected to the daily lessons.

UNIT 2	Content Focus	Math Practices
28 days	Ratios with Tables, Comparing, and Graphing, Rates, Percents, and Converting Measurements	Make sense of problems and persevere in solving them
		Reason abstractly and quantitatively
		Construct viable arguments and critique the reasoning of others
		4. Model with Mathematics
		5. Use appropriate tools strategically
		6. Attend to precision
		7. Look for and make use of structure
		Look for and express regularity in repeated reasoning
17 days	Understanding Algebraic Expressions with Properties	Make sense of problems and persevere in solving them
		2. Reason abstractly and quantitatively
		3. Construct viable arguments and critique the reasoning of others
		4. Model with Mathematics
		5. Use appropriate tools strategically
		6. Attend to precision
		7. Look for and make use of structure
		8. Look for and express regularity in repeated reasoning
18 days	Writing and Solving Equations with all Operations in One and Two Variables, Writing, Graphing, and Solving Inequalities with all Operations	Make sense of problems and persevere in solving them
	Trequences With all Operations	2. Reason abstractly and quantitatively
		3. Construct viable arguments and critique the reasoning of others
		4. Model with Mathematics
		5. Use appropriate tools strategically
		6. Attend to precision
		7. Look for and make use of structure

	8. Look for and express regularity in repeated reasoning

<b>Priority Standards</b>	
MA.6.RP.A.1	Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.
MA.6.RP.A.2	Understand the concept of a unit rate $a/b$ associated with a ratio $a:b$ with $b \neq 0$ , and use rate language in the context of a ratio relationship.
MA.6.RP.A.3d	Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.
MA.6.NS.C.5	Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
MA.6.NS.C.6	Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
MA.6.NS.C.7	Understand ordering and absolute value of rational numbers.
MA.6.NS.C.8	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.
MA.6.EE.B.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
MA.6.EE.B.7	Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which $p$ , $q$ and $x$ are all nonnegative rational numbers.
MA.6.EE.B.8	Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real- world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.
MA.6.EE.C.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.

# **Unit Assessments**

- Big Ideas Chapter 5 Assessment with Standards
- Big Ideas Chapter 6 Assessment with Standards
- Big Ideas Chapter 7 Assessment with Standards
- Big Ideas Quix 6.1-6.3
- Big Ideas Quiz 5.1-5.4
- Big Ideas Quiz 5.5-5.7
- Big Ideas Quiz 6.4-6.5
- Big Ideas Quiz 7.1-7.4
- Big Ideas Quiz 7.5-7.7
- S/W Grade 6 Math Benchmark Unit 2

**Student Learning Goals (Objectives)** 

Content Focus	cccs	Learning Goals	Learning Targets
	Priority Standard		
Understand ratios, ratio tables, rates, and unit rates. Understand fraction and percent comparisons.	MA.6.6.RP.2 MA.6.6.RP.3	Solve real world and mathematical problems using ratios and unit rates (6.RP.3)	I can perform basic processes, such as  • use ratio language to describe a ratio relationship between two quantities (6.RP.1)  • Use rate language in the context of a ratio relationpship (6.RP.2)  • Recognize multiple equivalent representations of ratios
understandings of arithmetic to algebraic expressions	6.EE.1 6.EE.2 6.EE.3 6.EE.4	Evaluate expression at specific values of their variables including whole-number exponents (6.EE.1; 6.EE.2c)  Generate equivalent	I can perform basic process, such as

		expressions using the	
		properties of operations (6.EE.3)	
Apply and extend previous	MA.6.6.EE.5		I can perform basic processes, such as
	A.6.6.EE.7 Solve real world and mathematical equations		
expressions to solve	MA.6.6.EE.8	of the form x + p = q when all variables are nonnegative, rational numbers (6.EE.7)	to determine
equations and inequalities	MA.6.6.EE.9		whether a given number makes an equation or inequality (6.EE.5) • Use variables to
		Write an inequality of the form x > c or x < c to represent a constraint of condition of a real-world or mathematical problem (6.EE.8)	represent numbers and write expressions (6.EE.6) • Represent solutions of inequalities on number line
		Analyze the relationship between the independent and dependent variables using graphs, tables, and equations (6.EE.9)	diagrams (6.EE.8)  • Write an equation to express one quantity (dependent variable) in terms of the other quantity (independent variable (6.EE.9)

- SWABT write an inequality of the form x > c or x < c to represent a constraint of condition of a real world or mathematical problem (6.EE.8)
- SWBAT analyze the relationship between the independent and dependent variable using graphs, tables, and equations (6.EE.9)
- SWBAT solve real world and mathematical equations of the form x + p = q when all variables are non negative, rational numbers (6.EE.7)
- SWBAT solve real world and mathematical problems using ratios and unit rates (6.RP.3)

## **Unit Learning Targets**

- I can demonstrate how ratios compare two quantities: the quantities do not have to be the same unit of measure.
- I can explain how order matters when writing a ratio.
- I can analyze context to determine which kind of ratio is represented.
- I can analyze the relationship between a ratio a:b and a unit rate a/b where is not equal to 0.
- I can analyze the relationship between the dependent variable and independent variable using tables and graphs.
- I can calculate absolute value.
- I can calculate the distance between two points with the same first coordinate or same second coordinate.
- I can define an inverse operation.
- · I can define independent and dependent variables.
- I can demonstrate how ratios can be simplified.
- I can develop a rule for solving one step equations.
- I can distinguish comparisons of absolute value from statements about order and apply to real world contexts.
- I can explain where zero fits into a situation represented by integers.
- I can find a position pairs of integers and other rational numbers on a coordinate plane.
- I can find and position integers and other rational numbers on a horizontal or vertical number line diagram.
- I can find the missing values in a table of equivalent ratios.
- I can generalize that all ratios relate two quantities or measures within a given situation in a multiplication relationship.
- I can graph points in all four quadrants of the coordinate plane.
- I can identify an integer and its opposite.
- I can identify and calculate a unit rate.
- I can make a table of equivalent ratios using whole numbers.
- I can recognize solving an equation or inequality as a process of answering which values from a specific set, if any, make the equation or inequality true.
- I can recognize that ratios appear in a variety of different contexts: part-to-whole, part-to-part, and rates.
- I can represent solutions to inequalities on a number line.
- I can solve and write equations for real world situations.
- I can solve real-world problems by graphing points in all four quadrants.
- I can solve real-world problems involving rate and ratio.
- I can use appropriate math terminology as related to rate.
- I can use integers to represent quantities in real world situations.
- I can use inverse operations to solve one step variable equations.
- I can use substitution to determine whether a given number in a specified set makes an equation or inequality true.
- I can use the solution to an equation or inequality to prove that the answer is correct.

- I can use variables to represent two quantities in a real world problem.
- I can write an inequality to represent a condition.
- I can write ratio notation.

**Learning Plan (Skills and Activities)** 

Unit 2	Topic	Activity	Learning Goals	Learning Targets	Resource
Weeks 12-	<del></del>	Whole Group: Ch. 5	SWBAT	I can:	Big Idea
16 weeks 12-	Comparing, and	/Lessons 1-7 (from Big	understand the	ı can.	Dig idea
	Graphing, Rates,	Ideas Teachers Manual)	concept of a ratio	• write ratio	NJ DOE
	Percents, and	racus reactions triantaury	concept of a ratio	notation.	Curriculi
	Converting	Chapter Opener, Start	SWBAT use ratios		
	Measurements	Thinking! Warm-Up	to describe the	order matters	National
			relationship	when writing a	Virtual
		Introduce Vocabulary	between two	ratio.	Manipula
		Words. Laurie's notes.	quantities	<ul> <li>demonstrate how</li> </ul>	A 1
		A ativity I Journal with	CMDAT	ratios can be	Accelera
		Activity Journal with partners. Teachers can	SWBAT use ratio	simplified.	Corestan
		decide which pages will	tables to find	<ul> <li>demonstrate how</li> </ul>	Corestan
		be done in groups and	equivalent ratios	ratios compare	NJCTL
		which pages will be	SWBAT solve	two quantities:	
		done during independent		the quantities do	Chromet
		work.)	1	not have to be	
		/	SWBAT	the same unit of	
			understand the	measure.	
			concepts of rates	• recognize that	
		Small Group:	and unit rates	ratios appear in a	
		Journal activities.	CMDAT	variety of different	
		Journal activities.	SWBAT write unit	contexts: part-to-	
		Lesson problems from	rates	whole, part-to-	
		text or on-line digital	SWBAT compare	part, and rates.	
		book.	ratios	• generalize that	
			Tutios .	all ratios relate	
		Lesson tutorials from	SWBAT compare	two quantities or	
		dynamic classroom.	unit rates	measures within	
		D:00 1: 4 11		a given situation	
		Differentiated lessons	SWBAT graph	in a	
		from dynamic classroom.	ordered pairs to	multiplication	
		Classiculli.	compare ratios and	retationship.	
		Skills review handbook.	rates	<ul> <li>analyze context</li> </ul>	
		This is the transfer in the industrial	SWBAT write	to determine	
			percents as	which kind of	
			fractions	ratio is	
		Independent Work:		represented.	
			SWBAT write	• identify and	
		Resources by the	fractions as	calculate a unit	
		Chapter – Practice A and	percents	rate.	
		В		• use appropriate	
			SWBAT find	math	

		Puzzle Time	percents of numbers	terminology as related to rate.	
		Student Text problems Enrichment and Extension Technology Connection	SWBAT find the whole given the part and the percent SWBAT use conversion factors	<ul> <li>analyze the relationship between a ratio a:b and a unit rate a/b where b is not equal to 0.</li> <li>make a table of equivalent ratios using whole numbers.</li> <li>find the missing values in a table of equivalent ratios.</li> <li>solve real-world problems involving rate and ratio.</li> </ul>	
Weeks 16-		Whole Group: Ch. 5	SWBAT use the	I can:	Big Idea
18	Understanding Algebraic	/Lessons 1-6 (from Big Ideas Teachers Manual)	promptly at materials	•use numbers and variables to evaluate	National Virtual
	Expressions with Properties	Chapter Opener, Start Thinking! Warm-Up	and a mixed number. This is	expressions.	Manipula Accelera
		Introduce Vocabulary Words. Laurie's notes.	generalized to multiply mixed numbers	• translate written phrases into algebraic expressions.	Corestan
		Activity Journal with partners. Teachers can	• SWBAT	•translate algebraic expressions into written	NJCTL
		decide which pages will	word problems,	phrases.	Chromel
		be done in groups and which pages will be done during independent work.)	and then write and evaluate a mathematical expression that	• create equivalent expressions using the properties of operations.	
			corresponds to the given situations	•apply properties of operations to create	
		Small Group:	P S W DA I EXDIAIII	equivalent expressions.  • recognize when two	
		Journal activities.  Lesson problems from	algebraic expression containing a	• recognize when two expressions are equivalent.	
		text or on-line digital book.	variable	• prove that two	
		Lesson tutorials from dynamic classroom.	• SWBAT write algebraic expressions to represent phrases	expressions are equivalent no matter what number is	

Differentiated lessons from dynamic classroom.  Skills review handbook.  Skills review handbook.  Independent Work:  Resources by the Chapter – Practice A and B  Puzzle Time  Puzzle Time  Student Text problems  Enrichment and Extension  Technology Connection  Technology Connection  SwBAT gain an understanding of what is meant by order and revolvance and two other properties, to show that expressions are equivalent  **SWBAT gain an understanding of what is meant by order and properations of what is meant by order and revolvance and two other properties, to show that expressions are equivalent  **SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT write and glepending on the descenariosities exertaristics and unknown number, or, multiplication, any number in a specific set.  **Testate variables and unknown number, or, multiplication, any number in a specific set.  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT write and glepending on the center to expression that expressions are the expression and the context.  **Testate variable can revolve and expression that expression and the context.  **Testate variables and unknown number, or, multiplication, and unknown number of expression that expression and expression and expression and express			D: CC 4: 4 11	11 1 1 1	1 22 4 1	
classroom.  Skills review handbook.  Skills review handbook.  Independent Work:  Resources by the Chapter Practice A and B  Puzzle Time Student Text problems Enrichment and Extension Technology Connection  SwBAT gain an understanding of what is meant by order and grouping as they apply to number operations  **SwBAT use the Commutative and Associative Properties, and two other properties, and two other properties, and two other properties, and two other properties are quivalent  **SwBAT gain an understanding of what is meant by order and grouping as they apply to number operations  **SwBAT use the Commutative and Associative Properties, and two other properties, and two other properties to show that expressions are equivalent  **SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Property to show that two expressions are equivalent  **SwBAT use the Distributive Properties, and two other properties, and two other properties, and two o			Differentiated lessons		substituted.	
Skills review handbook.  Skills review handbook.  Skills review handbook.  Skills review handbook.  Independent Work:  Resources by the Chapter - Practice A and B Puzzle Time  Puzzle Time  Student Text problems Entrichment and Extension Technology Connection  SWBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property on be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT write analgebraic averables to a context.  Technology Connection  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Commutative and Associative Property to show that two oxpressions are equivalent  SWBAT use the Commutative and Associative Property to show that two oxpressions are equivalent Property to show t				1 .		
Skills review handbook.  Independent Work:  Resources by the Chapter – Practice A and B  Puzzle Time Student Text problems Enrichment and Extension Technology Connection  Technology Connection  Technology Connection  SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that expressions are equivalent  SWBAT use the Distributive Property to show that two over the distribution over the distribution over the distribution over the distribution of the dentity of the distribution of the context.  Weeks 19- Weeks 19- Writing and Solving 21 Equations with all Operations in One and Two Variables,  Weeks 21- Big Idea  Freeding of the center of the context.  SWBAT use the Commutative and Associative Properties, to show the distribution of the context.  *SWBAT use the Commutative and the Commutative a			classroom.	the operations of	_	
Independent Work: Resources by the Chapter – Practice A and B Puzzle Time Student Text problems Enrichment and Extension Technology Connection  SWBAT gain an understanding of what is meant by order and Associative Properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that expressions are equivalent  SWBAT use the Distributive Property to show that wo other properties, to show that expressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT use the Distributive Property to show that two oxpressions are equivalent  SWBAT with the securior state of the control of the securior state of the control of the cont				addition,	variable can represent an	
Independent Work:  Resources by the Chapter – Practice A and Pursual B  Puzzle Time Student Text problems Enrichment and Extension Technology Connection  SWBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that expressions are equivalent  SWBAT use the Distributive Property to show that wo captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distributive Property to show that two captes and the distribution and algebrate captes and the captes and			Skills review handbook.	subtraction,	unknown number, or,	
Independent Work:  Resources by the Chapter – Practice A and B Puzzle Time Student Text problems Enrichment and Extension Technology Connection  Student Text problems Furichment and Extension Technology Connection  Student Text problems  Enrichment and Extension Technology Connection  SWBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Properties, to show that expressions are equivalent  SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two other properties, to show that two other properties, to show that expressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent  SWBAT use the Distributive Property to show that two owexpressions are equivalent				multiplication and	depending on the	
Independent Work:   Resources by the Chapter – Practice A and B					scenario/situation any	
Resources by the Chapter – Practice A and B  Puzzle Time Student Text problems Enrichment and Extension Technology Connection Technology Connection  StuBAT gain an understanding of what is meant by order and grouping as they apply to number operations SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Weeks 19- Weeks 19- Equations with all Operations in One and Two Variables,  Weets 19- Equations with all Operations in One and Two Variables,  Weath a supply to number operations SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to					•	
Resources by the Chapter – Practice A and B Puzzle Time Student Text problems Enrichment and Extension Technology Connection Technology Connection  SWBAT gain an understanding of how the Distributive Properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two very resonate and two data expressions are equivalent  Weeks 19- Weeks 19- Weeks 19- Equations with all Operations in One and Two Variables, Subscience A and B context.  Worting and Solving a			Independent Work:			
Resources by the Chapter – Practice A and B Puzzle Time Student Text problems Enrichment and Extension Technology Connection Technology Connection  Technology Connection  SwBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SwBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving [Auations with all Operations in One and Two Variables, and the context.  SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving [Auations with all Operations in One and Two Variables, and the context.  SwBAT use the Commutative and Associative Property can be used to perform multiplication problems.			macpenaent work.			
Chapter – Practice A and B  Puzzle Time  Student Text problems  Enrichment and Extension  Technology Connection  Technology Connection  *SWBAT gain an understanding of what is meant by order and grouping as they apply to number operations  *SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  *SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7  Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,  Whole Group: Ch.7  Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,  *Order and grouping as they apply to number operations of the commutative and Associative Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT write word sentences as equations  *Technology Connection  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT write word sentences as equations  *Technology Connection  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT write word sentences as equivalent  **Tecognize**  **Tecognize**  **Tecognize**  **Tecognize**  **Technology Connection  **Technology			Pasources by the	1 0		
Puzzle Time Student Text problems Enrichment and Extension Technology Connection  SwBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SwBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property can be used to perform multiplication problems using mental math  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch. 7 Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables, and Two Variables, equations  Puzzle Time  SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property to show that two expressions are equivalent  World Group: Ch. 7 Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables, solving an Curriculi			Charten Duration A and	expression that	context.	
Puzzle Time Student Text problems Enrichment and Extension Technology Connection  SwBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SwBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property can be used to perform multiplication problems using mental math  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch. 7 Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables, and Two Variables, equations  Puzzle Time  SwBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SwBAT use the Distributive Property to show that two expressions are equivalent  World Group: Ch. 7 Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables, solving an Curriculi			Chapter – Practice A and	represents a verbal		
Student Text problems Enrichment and Extension Technology Connection  SWBAT gain an understanding of what is meant by order and grouping as they apply to number operations  SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, and Two Variables, and Two Variables, and Two Variables, and Text problems  Weeks 19- Requestions with all Operations in One and Two Variables, and Two Variables, and the matter and understanding of what is meant by order and grouping as they apply to number operations  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent			В		• write expressions when	
Student Text problems Enrichment and Extension Technology Connection  Technology Connection  **SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  **SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Dist			L		solving a real-world or	
Student Text problems Enrichment and Extension Technology Connection Technology Connection  Technology Connection  Technology Connection  *SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  *SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *S			Puzzle Time	• SWBAT gain an	mathematical problem.	
Student Text problems Enrichment and Extension Technology Connection  Technology Connection  **SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  **SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use **Distributive Property to show that two expressions are equivalent  **SWBAT write word sentences as equations  **Precognize Solving an **Curriculum **Property to show that two expressions are equivalent  **SWBAT write word sentences as equations  **Precognize Solving an **Curriculum **Curriculum **Curriculum **Property to show that two expressions are equivalent  **SWBAT write word sentences as equations  **Precognize Solving an **Curriculum **Curriculum **Curriculum **Property to show that two expressions **Property to show that				_	_	
Enrichment and Extension  Technology Connection  Technology Connection  SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, and Two Variables, and Two Variables, and two other properties, and two other properties, to show that expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT write Word sentences as equivalent  Operations in One and Two Variables,			Student Text problems			
Enrichment and Extension  Technology Connection  Technology Connection  **SWBAT use the Commutative and Associative Properties, to show that expressions are equivalent  **SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWB						
Technology Connection  **SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  **SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT			Enrichment and			
Technology Connection  Technology Connection  SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Equations with all Operations in One and Two Variables, and Two Variables, and Two Variables, and two dates are equivalent  Verification problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of show that two expressions are equivalent  SWBAT use the Distributive Property of			Extension	U 1 U 1		
**SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  **SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that two expressions are equivalent  **SWBAT use the Distributive Property to show that the Distributive Property to show that the Distributive Property to show that the D				* * *		
• SWBAT use the Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  • SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent			Technology Connection	operations		
Commutative and Associative Properties, and two other properties, to show that expressions are equivalent  *SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT use the Distributive Property to show that two expressions are equivalent  *SWBAT			commercial			
Associative Properties, and two other properties, to show that expressions are equivalent  • SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an  NJ DOE Curriculu				• SWBAT use the		
Properties, and two other properties, to show that expressions are equivalent  • SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- 21 Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 / Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,				Commutative and		
Properties, and two other properties, to show that expressions are equivalent  • SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- 21 Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 / Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,				Associative		
two other properties, to show that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving 21 Equations with all Operations in One and Two Variables, are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, are equivalent  Weeks 19- Curricult  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, are equivalent  Weeks 19- Curricult  Woods 19- Operations in One and Two Variables, are equivalent  Weeks 19- Operations in One and Two Variables, are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT with the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent  Very SWBAT use the Distributive Property to show that two expressions are equivalent						
properties, to show that expressions are equivalent  • SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT write SWB				_ ·		
that expressions are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving 21 Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 / Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,						
are equivalent  SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7  Lessons 1-7 (from Big Ideas Teachers Manual)  Jeas Teachers Manual)  Are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT write word sentences as equations  Operations in One and Two Variables,				F -		
SWBAT gain an understanding of how the Distributive Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, and Two Variables, show that two evapressions are equivalent of the property to show that two expressions are equivalent of the prop						
weeks 19- Weeks 19- Equations with all Operations in One and Two Variables,  wunderstanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an NJ DOE Curriculi				are equivalent		
weeks 19- Weeks 19- Equations with all Operations in One and Two Variables,  wunderstanding of how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an NJ DOE Curriculi						
how the Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Versions in One and Two Variables,  whole Group: Ch.7 /Lessons 1-7 (from Big Ideas Teachers Manual) Ideas Teachers Manual)  how the Distributive Property to show that two expressions are equivalent  I can: Big Ideas  • recognize solving an  Curriculi				_		
Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- 21 Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 /Lessons 1-7 (from Big Ideas Teachers Manual) Ideas Teachers Manual) John Curricult  Distributive Property can be used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an Curricult				understanding of		
Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7  Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,  Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT write word sentences as equations  • recognize solving an Curriculi				how the		
Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7  Lessons 1-7 (from Big Ideas Teachers Manual) and Two Variables,  Property can be used to perform multiplication problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT write word sentences as equations  • recognize solving an Curriculi				Distributive		
weeks 19- Writing and Solving 21 Equations with all Operations in One and Two Variables,  weeks 19- Used to perform multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an  Curriculi				Property can be		
multiplication problems using mental math  • SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,    Mole Group: Ch.7				1 * *		
problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7  Lessons 1-7 (from Big Ideas Teachers Manual)  Jean Big Ideas Teachers Manual)  Problems using mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  SWBAT write word sentences as equations  Precognize solving an Curriculum						
mental math  SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Under Group: Ch.7 Equations with all Operations in One and Two Variables,    Mole Group: Ch.7						
• SWBAT use the Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7						
Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an Curriculi				mental math		
Distributive Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Distributive Property to show that two expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an Curriculi				GYAD + T		
Property to show that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 (from Big Ideas Teachers Manual) Ideas Teachers Manual)  Property to show that two expressions are equivalent  SWBAT write word sentences as equations  • recognize solving an Curricula						
that two expressions are equivalent  Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 /Lessons 1-7 (from Big Ideas Teachers Manual) I can: word sentences as equations  • recognize solving an Curriculu						
Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7 (from Big Ideas Teachers Manual) Ideas Teachers Manual)  expressions are equivalent  • SWBAT write word sentences as equations  • recognize solving an Curriculum				Property to show		
Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, Operations in One and Two Variables, Operations on the control of the				that two		
Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables, Operations in One and Two Variables, Operations on the control of the				expressions are		
Weeks 19- Writing and Solving Equations with all Operations in One and Two Variables,  Whole Group: Ch.7  /Lessons 1-7 (from Big Ideas Word sentences as equations  • SWBAT write word sentences as equations  • recognize solving an Curriculum				1 *		
Equations with all Operations in One and Two Variables,      Description   Lessons 1-7 (from Big   Word sentences as equations	Weeks 10	Writing and Salving	Whole Group: Ch 7	; •	Lean	Rig Idaa
Operations in One and Two Variables,  Ideas Teachers Manual) equations  equations  orecognize solving an Curriculu	1	_	_		n can.	pig idea:
and Two Variables, solving an Curricult	41	1 -				MI DOE
			udeas Teachers Manual)	equations	_	1
Writing, Graphing, Chapter Opener, Start SWBAT use equation or		· · · · · · · · · · · · · · · · · · ·		CALID 4 T	_	Curriculi
		Writing, Graphing,	Chapter Opener, Start	SWBATuse	equation or	

and Salvina	Thinking! Warm Un	addition or	inequality as a National
and Solving Inequalities with all	Thinking! Warm-Up	subtraction to	inequality as a National process of Virtual
Operations	Introduce Vocabulary	solve equations	answering which Manipula
Operations	Words. Laurie's notes.	Solve equations	values from a
		SWBAT use	specific set, if Accelera
	Activity Journal with	multiplication or	any, make the
	I '	division to solve	equation or Corestan
	[a . a . a . a	equations	inequality true
	be done in groups and	1	• use the solution NJCTL
	which pages will be	SWBAT identify	to an aquation or
	done during independent	1 * 1	inequality to Chromet
	work.)	dependent	prove that the
		variables	answer is
			correct.
	C all C	SWBAT write	• use substitution
	Small Group:	equations in two	to determine
	Journal activities.	variables	whether a given
		SWBAT use	number in a
	Lesson problems from	tables and graphs	specified set
	text or on-line digital	to analyze the	makes an
	book.	relationship	equation or
		relationship	inequality true.
	Lesson tutorials from	SWBAT write	<ul><li>define an inverse</li></ul>
	dynamic classroom.	word sentences as	operation.
	D'CC 4' 4 11	inequalities	• use inverse
	Differentiated lessons		operations to
	from dynamic classroom.	SWBAT use all	solve one step
	Classroom.	operations to solve	variable
	Skills review handbook.	inequalities	equations.
	Skins ieview nanasook.		• develop a rule
			for solving one
			step equations.
	Independent Work:		• solve and write
			equations for real
	Resources by the		orld situations.
	Chapter – Practice A and		• write an
	В		inequality to
	D1- T'		represetn a
	Puzzle Time		condition.
	Student Text problems		• represetn
	Student Text problems		solutions to
	Enrichment and		inequalitites on a number line.
	Extension		• define
	Technology Connection		independent and dependent
			variables.
			• use variables to
			represent two
			quantities in a real world
	l .		real world

		problem.	
		<ul><li>analyze the</li></ul>	
		relationship	
		between the	
		dependent	
		variable and	
		independent	
		variable using	
		tables and	
		graphs.	

#### **Materials and Resources**

- Big Ideas Big Ideas Learning LLC. 2014 www.bigideasmath.com
- Brightlinks Projector
- Chromebooks
- Document Camera
- http://www.njctl.org/courses/math/
- National Library of Virtual Manipulatives http://nlvm.usu.edu/en/nav/vlibrary.html
- NJ DOE Model Curriculum www.state.nj.us/education/modelcurriculum
- Soundfield System
- White Boards
- www.corestandards.org

# **Technology Integration**

- 8.1.8.A.1 Demonstrate knowledge of a real world problem using digital tools
- 8.2.8.A.2 Examine a system, consider how each part relates to other parts, and discuss a part to redesign to improve the system.
- Create instructional videos using Animote app
- · Create screenshots to record explanations of problems

TECH.8.1.8.A.1 Demonstrate knowledge of a real world problem using digital tools.

TECH.8.1.8.A.2 Create a document (e.g., newsletter, reports, personalized learning plan, business letters

or flyers) using one or more digital applications to be critiqued by professionals for

usability.

TECH.8.1.8.A.3 Use and/or develop a simulation that provides an environment to solve a real world

problem or theory.

Create a database query, sort and create a report and describe the process, and explain the report results.

# **21st Century Life and Career Ready Practices**

- CRP3. Attend to personal health and financial well-being.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

# **Strategies for Differentiating Instruction**

- · Extend pacing of lessons
- Graph paper
- · Incorporate centers that focus on skills that students are struggling with
- Modified/shortened assignments if necessary
- Multiplication chart
- Place value chart if applicable
- Provide a copy of written notes/directions
- Provide list/chart of key words used in word problems to help determine operation. For example "In all, altogether mean addition"
- Provie list of formulas/conversions if applicable
- Small group instruction based on levels/abilities
- Use of calculator
- Use of manipulatives
- Utilize visual aids

#### **Marzano Elements**

- Communicating high expectations for each student to close the achievement gap (DQ9)
- Establishing and maintaining effective relationships in a student centered classroom (DQ8)
- Helping students engage in cognitively complex tasks (DQ4)
- Helping students examine similarities and differences (DQ3)
- Helping students examine their reasoning (DQ3)
- Helping students practice skills, strategies, and processes (DQ3)
- Helping students process new content (DQ2)
- Helping students revise knowlege (DQ3)
- Identifying critical content from the standards (DQ2)
- Organizing students to interact with content (DQ2)
- Organizing students to practice and deepen knowledge (DQ3)
- Previewing New Content (DQ2)

- providing feedback and celebrating success (DQ1)
- Reviewing Content (DQ3)
- Using engagement strategies (DQ3)
- Using formative assessments to track student progress (DQ1)
- Using questions to help students elaborate on content (DQ2)