


Ganado Unified School District (Mathematics/4th Grade)




PACING Guide SY 2018 - 2019

Timeline & Resources	AZ College and Career Readiness Standard	Essential Question (HESS Matrix)	Learning Goal	Vocabulary (Content/Academic)
Quarter 1 Aug. -Oct. 2018	Domain: Number and Operations in Base Ten Chapter 1 Place Value Chapter 2 Add and Subtract Whole Numbers Chapter 3 Understand Multiplication and Division		Domain: Number and Operations in Base Ten Chapter 4 Multiply with One-Digit Numbers Chapter 5 Multiply with Two-Digit Numbers Chapter 6 Divide by a One-Digit Number	
	Chapter 1 Place Value Lesson 1: Place Value	Essential Question	Learning Objectives	Vocabulary
McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com	4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. Mathematical Practices <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. 	How does place value help represent the value of numbers? 	Students will identify the place value of digits in multi-digit numbers.	Academic/Content <ul style="list-style-type: none"> ○ digit ○ place value
	Lesson 2 Read and Write Multi-Digit Numbers			
McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com	4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. Mathematical Practices	How does place value help represent the value of numbers?	Students will read and write multi-digit whole numbers.	Academic/Content <ul style="list-style-type: none"> ○ period ○ standard form ○ expanded form ○ word form

	<ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 3 – Compare Numbers</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>How does place value help represent the value of numbers?</p>	<p>Students will compare numbers using a number line and a place-value chart.</p>	<p>Academic /Content</p> <ul style="list-style-type: none"> ○ is equal to ($=$) ○ number line ○ is greater than ($>$) ○ is less than ($<$)
	<p>Lesson 4 Order Numbers</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>Mathematical Practices</p>	<p>How does place value help represent the value of numbers?</p>	<p>Students will order numbers by using a place-value chart and comparing the digit values.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ order

	<ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 5 Use Place Value to Round</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	<p>How does place value help represent the value of numbers?</p>	<p>Students will estimate numbers by rounding.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ number line ○ round
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>Lesson 6 Problem-Solving Investigation: Use the Four-Step Plan</p> <p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. 	<p>How does place value help represent the value of numbers?</p>	<p>Students will use the four-step plan to solve problems.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multi-digit ○ Base Ten numerals ○ symbols ○ record results



	<ul style="list-style-type: none"> ○ Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	Chapter 2 Add and Subtract Whole Numbers	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Addition Properties & Subtraction Rules			
McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com	4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm. Mathematical Practices <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	What strategies can I use to add or subtract?	Students will use addition properties and subtraction rules to add and subtract.	Academic/Content <ul style="list-style-type: none"> ○ Associative Property of Addition ○ Commutative Property of Addition ○ Identity Property of Addition ○ unknown
	Lesson 2 Addition and Subtraction Patterns			
McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com	4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm. Mathematical Practices <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	What strategies can I use to add or subtract?	Students will use patterns to solve addition and subtraction problems.	Academic/Content <ul style="list-style-type: none"> ○ pattern
	Lesson 3 Add and Subtract Mentally			



<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>What strategies can I use to add or subtract?</p> 	<p>Students will use mental math to add and subtract.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ hundreds ○ tens ○ thousands
	<p>Lesson 4 Estimate Sums and Differences</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.3 Use place value understanding for multi-digit whole numbers.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Attend to precision. 	<p>What strategies can I use to add or subtract?</p> 	<p>Students will estimate sums and differences of multi-digit numbers.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ estimate ○ difference
	<p>Lesson 5 Add Whole Numbers</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. 	<p>What strategies can I use to add or subtract?</p>	<p>Students will add multi-digit whole numbers.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ regroup




	<ul style="list-style-type: none"> Attend to precision. 			
	<p>Lesson 6 Subtract Whole Numbers</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others. Use appropriate tools strategically. Attend to precision. Look for and make use of structure. Look for and express regularity in repeated reasoning. 	<p>What strategies can I use to add or subtract?</p>	<p>Students will subtract multi-digit whole numbers.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> minuend subtrahend
	<p>Lesson 7 Subtract Across Zeros</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Make sense of problems and persevere in solving them. Construct viable arguments and critique the reasoning of others Use appropriate tools strategically. Look for and make use of structure. Look for and express regularity in repeated reasoning. 	<p>What strategies can I use to add or subtract?</p>	<p>Students will subtract multi-digit numbers when some digits are zero.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> minuend regroup subtrahend
	<p>Lesson 8 Problem-Solving Investigation: Draw a Diagram</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p> <p>Mathematical Practices</p>	<p>What strategies can I use to add or subtract?</p>	<p>Students will solve problems by drawing a diagram.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> add subtract



	<ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Use appropriate tools strategically. 			<ul style="list-style-type: none"> ○ standard algorithm ○ multi-digit
	<p>Lesson 9 Solve Multi-Step Word Problems</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	<p>What strategies can I use to add or subtract?</p>	<p>Students will solve multi-step word problems using addition and subtraction.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ equation ○ variable
	<p>Chapter 3 Understand Multiplication and Division</p>	<p>Essential Question</p>	<p>Learning Objectives</p>	<p>Vocabulary</p>
	<p>Lesson 1 Relate Multiplication and Division</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p>How are multiplication and division related?</p>	<p>Students will understand how multiplication and division are related.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ dividend ○ divisor ○ factor ○ product ○ quotient ○ fact family

	<p>Mathematical Practices</p> <ul style="list-style-type: none"> Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others Model with mathematics. Attend to precision. Look for and make use of structure. Look for and express regularity in repeated reasoning. 			
	<p>Lesson 2 Relate Division and Subtraction</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others Model with mathematics. Use appropriate tools strategically. Attend to precision. Look for and express regularity in repeated reasoning. 	<p>How are multiplication and division related?</p>	<p>Students will relate division and subtraction.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> repeated subtraction
	<p>Lesson 3 Multiplication as Comparison</p>			
<p>McGraw-Hill My Math:</p>	<p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35=5 \times 7$ as a statement that 35 is 5 times as many as 7</p>	<p>How are multiplication and division related?</p>	<p>Students will recognize the comparison of two groups as another strategy to use when multiplying.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> bar diagram



<p>Go Digital at connected.mcgraw-hill.com</p>	<p>and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and express regularity in repeated reasoning. 			
	<p>Lesson 4 Compare to Solve Problems</p>	<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparisons, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. 	<p>How are multiplication and division related?</p> 	<p>Students will use comparison to solve problems.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ divide ○ multiply ○ add ○ compare ○ subtract
	<p>Lesson 5 Multiplication Properties and Division Rules</p>			
<p>McGraw-Hill My Math:</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply</p>	<p>How are multiplication and division related?</p>	<p>Students will use multiplication properties and division rules.</p>	<p>Academic/Content</p>





<p>Go Digital at connected.mcgraw-hill.com</p>	<p>two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			<ul style="list-style-type: none"> ○ Commutative Property of Multiplication ○ Identity Property of Multiplication ○ Zero Property of Multiplication
	<p>Lesson 6 Associative Property of Multiplication</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 	<p>How are multiplication and division related?</p> 	<p>Students will use the Associative Property of Multiplication to solve problems.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ Associative Property of Multiplication
	<p>Lesson 7 Factors and Multiples</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.OA.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in</p>	<p>How are multiplication and division related?</p>	<p>Students will find factors and multiples of whole numbers.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ decompose ○ multiple




	<p>the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 			
	<p>Lesson 8 Problem-Solving Investigation</p>			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparisons, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Use appropriate tools strategically. 	<p>How are multiplication and division related?</p> 	<p>Students will check answers for reasonableness.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multiply ○ divide ○ compare ○ equation ○ addition ○ symbol
	<p>Chapter 4 Multiply with One-Digit Numbers</p>	<p>Essential Question</p>	<p>Learning Objectives</p>	<p>Vocabulary</p>
	<p>Lesson 1 Multiples of 10, 100, and 1,000</p>			

<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	<p>How can I communicate multiplication?</p> 	<p>Students will multiply multiples of 10, 100, and 1,000 using basic facts and patterns.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ multiples ○ patterns
<p>Lesson 2 Round to Estimate Products</p>		<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Use appropriate tools strategically. ○ Look for and make use of structure. 	<p>How can I communicate multiplication?</p> 	<p>Students will estimate products by rounding.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ place value ○ round
<p>Lesson 3 – Hands On: Use Place Value to Multiply</p>				
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the</p>	<p>How can I communicate multiplication?</p>	<p>Students will explore multiplication using models.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ multiply ○ digit ○ properties ○ equation

	<p>calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others Model with mathematics. 			<ul style="list-style-type: none"> operations array models
	Lesson 4 - Hands On: Use Models to Multiply			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Make sense of problems and persevere in solving them. Reason abstractly and quantitatively. Model with mathematics. Use appropriate tools strategically. Attend to precision. Look for and make use of structure. 	<p>How can I communicate multiplication?</p> <p>COMMUNICATION</p> <p></p> <p>SELF & SOCIAL AWARENESS</p>	<p>Students will explore multiplication using area models and partial products.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> Partial products
	Lesson 5 Multiply by a Two-Digit Number			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the</p>	<p>How can I communicate multiplication?</p>	<p>Students will multiply a two-digit number by a one-digit number.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> multiply digit properties equation operations





	<p>calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 			<ul style="list-style-type: none"> ○ array ○ models
	<p>Lesson 6 Hands-On: Model Regrouping</p>	<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	<p>How can I communicate multiplication?</p> 	<p>Students will explore multiplication with regrouping using models.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ regroup
	<p>Lesson 7 The Distributive Property</p>			
<p>McGraw-Hill My Math:</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply</p>	<p>How can I communicate multiplication?</p>	<p>Students will use the Distributive Property to make multiplication easier.</p>	<p>Academic/Content</p>

<p>Go Digital at connected.mcgraw-hill.com</p>	<p>two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 			<ul style="list-style-type: none"> ○ Distributive Property
	<p>Lesson 8 Multiply with Regrouping</p>	<p>COMMUNICATION</p>		
	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. 	<p>How can I communicate multiplication?</p> 	<p>Students will multiply a two-digit number by a one-digit number.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ factor ○ product ○ regroup
	<p>Lesson 9 Multiply by a Multi-Digit Number</p>			
	<p>4.NBT.5</p>	<p>How can I communicate multiplication?</p>	<p>Students will multiply a multi-digit number by a one-digit number.</p>	<p>Academic/Content</p>


	<p>Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 			<ul style="list-style-type: none"> ○ partial products
	<p>Lesson 10 Problem-Solving Investigation: Estimate or Exact Answer</p>			
	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others ○ Look for and express regularity in repeated reasoning. 	<p>How can I communicate multiplication?</p> 	<p>Students will determine if a problem needs an estimate or an exact answer.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ four-step plan ○ estimate ○ exact
	<p>Lesson 11</p>			


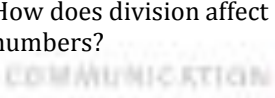

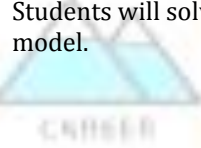
	Multiply Across Zeros			
	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others Model with mathematics. Attend to precision. Look for and make use of structure. Look for and express regularity in repeated reasoning. 	How can I communicate multiplication?	Students will multiply multi-digit numbers with zeros by a one-digit number.	Academic/Content <ul style="list-style-type: none"> Distributive Property estimate multiply partial products
	Chapter 5 Multiply With Two-Digit Numbers	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Multiply by Tens			
<p>McGraw-Hill My Math: Go Digital at connected.mcgraw-hill.com</p>	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equation, rectangular arrays, and /or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> Make sense of problems and persevere in solving them. Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others. 	How can I multiply by a two-digit number?	Students will use properties and algorithms to multiply by tens.	Academic/Content <ul style="list-style-type: none"> multiply digit place value




	<ul style="list-style-type: none"> ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 2 Estimate Products</p>			
	<p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place value.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>How can I multiply by a two-digit number?</p>	<p>Students will estimate products by rounding.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ estimate ○ digit
	<p>Lesson 3 Hands On: Use the Distributive Property to Multiply</p>			
	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number and multiply two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equation, rectangular arrays, and /or area models.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 	<p>How can I multiply by a two-digit number?</p>	<p>Students will explore multiplying by two-digit numbers.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multiply ○ digit ○ operations ○ equation ○ arrays ○ model



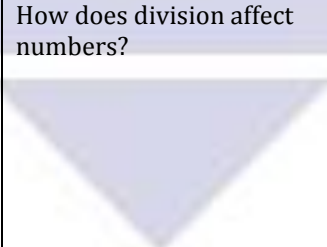
	<p>Lesson 4 Multiply by a Two-Digit Number:</p>			
	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number and multiply two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equation, rectangular arrays, and /or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for and make use of structure. 	<p>How can I multiply by a two-digit number?</p>  <p>THINKING</p>  <p>COMMUNICATION</p>	<p>Students will multiply two, two-digit numbers.</p>  <p>CAREER</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multiply ○ digit ○ operations ○ equation ○ arrays ○ model
	<p>Lesson 5 Solve Multi-Step Word Problems</p>			
	<p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainder must be interpreted, Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. 	<p>How can I multiply by a two-digit number?</p>  <p>SELF & SOCIAL AWARENESS</p>	<p>Students will use multiplication two solve multi-step word problems.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multistep ○ multiply ○ divide ○ addition ○ subtraction ○ operations



	<ul style="list-style-type: none"> ○ Construct viable arguments and critique the reasoning of others. ○ Attend to precision. ○ Look for and make use of structure. 			
	Lesson 6 Problem Solving Investigation: Make a Table			
	<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number and multiply two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equation, rectangular arrays, and /or area models.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. ○ Look for express regularity in repeated reasoning. 	<p>How can I multiply by a two-digit number?</p> <p>THINKING</p> <p>COMMUNICATION</p> <p>SELF & SOCIAL AWARENESS</p>	<p>Students will solve problems by making a table.</p> <p>CAREER</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multiply ○ digit ○ Place Value ○ operations ○ equation ○ arrays ○ model
	Chapter 6 Divide by a One-Digit Number	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Divide Multiples of 10, 100, and 1,000.			
	<p>4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.</p> <p>Mathematical Practices:</p>	<p>How does division affect numbers?</p>	<p>Students will use basic facts and patterns to divide mentally.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ multi-digit ○ represent ○ place value


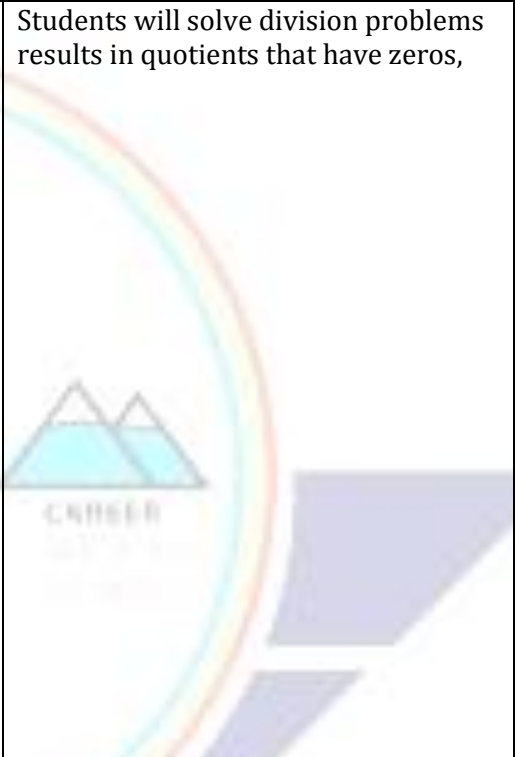
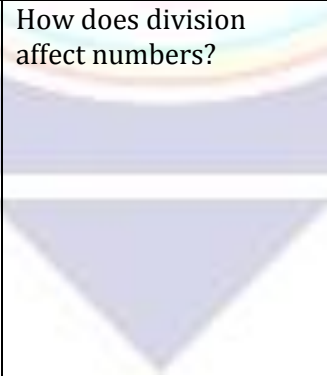
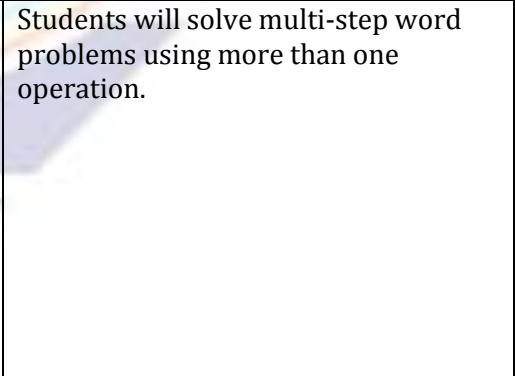
	<ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 2 Estimate Quotients</p>	<p>TRAINING</p>		
	<p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place value.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for express regularity in repeated reasoning. 	<p>How does division affect numbers?</p> <p>COMMUNICATION</p> <p>CAREER</p> <p>SELF & SOCIAL AWARENESS</p>	<p>Students will estimate quotients, using compatible numbers, basic facts, and place value.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ compatible numbers ○ multi-Digit ○ place Value
	<p>Lesson 3 Hands On: Use Place Value to Divide</p>			
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies base on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or are a models.</p>	<p>How does division affect numbers?</p>	<p>Students will use place value and models to explore dividing by one digit numbers.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ remainder ○ multi-digit ○ dividends ○ divisor ○ operations ○ division ○ properties


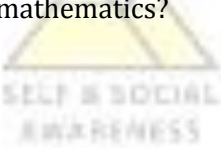
	<p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 			<ul style="list-style-type: none"> ○ equation ○ arrays ○ models
	<p>Lesson 4 Problem-Solving Investigation: Make a Model</p>			
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or are a models</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 	<p>How does division affect numbers?</p>  	<p>Students will solve problems by making a model.</p> 	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ quotients ○ remainder ○ dividends ○ divisors ○ properties ○ multiplication ○ division ○ equation ○ arrays ○ models
	<p>Lesson 5 Divide with Remainders</p>			
	<p>4.NBT.6</p>	<p>How does division affect numbers?</p>	<p>Students will divide with remainders and check using multiplication and addition.</p>	<p>Academic/Content</p>



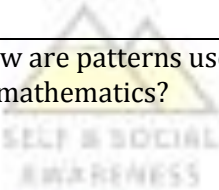
	<p>Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or are a models</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 			<ul style="list-style-type: none"> ○ quotients ○ remainder ○ dividends ○ divisors ○ properties ○ multiplication ○ division ○ equation ○ arrays ○ models
	<p>Lesson 6 Interpret Remainders</p>			
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or are a models</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 	<p>How does division affect numbers?</p> 	<p>Students will interpret what the remainder means in the context of a division problem.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ quotients ○ remainder ○ dividends ○ divisors ○ properties ○ multiplication ○ division ○ equation ○ arrays ○ models




	<p>Lesson 7 Place the First Digit</p>			
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or area models</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	<p>How does division affect numbers?</p> 	<p>Students will determine where to place the first digit when dividing.</p> 	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ quotients ○ remainder ○ dividends ○ divisors ○ properties ○ multiplication ○ division ○ equation ○ arrays ○ models
	<p>Lesson 8 Hands On: Distributive Property and Partial Quotients</p>			
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and</p>	<p>How does division affect numbers?</p> 	<p>Students will use the Distributive Property and partial quotients to divide.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ partial quotients ○ quotients ○ remainder ○ dividends ○ divisors ○ properties



	<p>explain the calculation by using equations, rectangular arrays, and/or are a models</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. ○ . Look for express regularity in repeated reasoning. 			<ul style="list-style-type: none"> ○ multiplication ○ division ○ equation ○ arrays ○ models
	<p>Lesson 9 Divide Greater Numbers</p>	<p>COMMUNICATION</p>		
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies base on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or are a models</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ . Look for express regularity in repeated reasoning. 	<p>How does division affect numbers?</p> 	<p>Students will solve division problems with greater numbers.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ hundreds ○ ones ○ tens ○ thousands

	<p>Lesson 10 Quotients with Zeros</p>			
	<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division, illustrate and explain the calculation by using equations, rectangular arrays, and/or area models</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. 	<p>How does division affect numbers?</p> 	<p>Students will solve division problems results in quotients that have zeros,</p> 	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ dividend ○ divisor ○ quotient ○ remainder
	<p>Lesson 11 Solve Multi-Step Word Problems</p>			
	<p>4.OA.3 Solve multistep word problems posed with whole numbers having whole-number answers using the four operations, including problems in which remainder must be interpreted. Represent these problems using equations using letter standing for the unknown quantity. Assess the reasonableness of answers using mental</p>	<p>How does division affect numbers?</p> 	<p>Students will solve multi-step word problems using more than one operation.</p> 	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ equation ○ parentheses

	<p>computation and estimation strategies including rounding.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. 			
<p>Quarter 2 Oct. -Dec. 2018</p>	<p>Domain: Operations and Algebraic Thinking</p> <ul style="list-style-type: none"> ○ Chapter 7 Patterns and Sequences 		<p>Domain: Number and Operations - Fractions</p> <ul style="list-style-type: none"> ○ Chapter 8 Fractions ○ Chapter 9 Operations with Fractions ○ Chapter 10 Fractions and Decimals 	
	<p>Chapter 7 Patterns and Sequences</p>	<p>Essential Question</p>	<p>Learning Objectives</p>	<p>Vocabulary</p>
	<p>Lesson 1 Pattern and Non-Numeric Patterns</p>			
	<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for and make use of structure. ○ . Look for express regularity in repeated reasoning. 	<p>How are patterns used in mathematics?</p> 	<p>Students will describe non-numeric growing and repeating patterns.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ non-numeric pattern ○ pattern

	<p>Lesson 2 Numeric Patterns</p>			
	<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Attend to precision. ○ Look for and make use of structure. 	<p>How are patterns used in mathematics?</p>  <p>COMMUNICATION</p> 	<p>Students will identify, describe, and extend numeric patterns.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ non-numeric pattern ○ rule
	<p>Lesson 3 Sequences</p>			
	<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Attend to precision. 	<p>How are patterns used in mathematics?</p> 	<p>Students will extend patterns and write observations about the pattern.</p>	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ sequence ○ term

	<ul style="list-style-type: none"> ○ Look for and express regularity in repeated reasoning. 			
	Lesson 4 Problem-Solve Investigation for a pattern			
	4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself. Mathematical Practices <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	How are patterns used in mathematics?   	Students will look for a pattern to solve problems.	Academic/Content <ul style="list-style-type: none"> ○ patterns ○ rule
	Lesson 5 Addition and Subtraction Rules			
	4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. 	How are patterns used in mathematics?	Students will find and use rules to write addition and subtraction equations.	Academic/Content <ul style="list-style-type: none"> ○ input ○ output



	<ul style="list-style-type: none"> ○ Attend to precision. ○ Look for and make use of structure. 			
	Lesson 6 Multiplication and Division Rules			
	4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself. Mathematical Practices <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	How are patterns used in mathematics? 	Students will find and use rules to write multiplication and division equations.	Academic/Content <ul style="list-style-type: none"> ○ division ○ multiplication
	Lesson 7 Order of Operation			
	4.OA.3 Solve multistep word problems posed with whole numbers having whole-number answers using the four operations, including problems in which remainder must be interpreted. Represent these problems using equations using letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. 	How are patterns used in mathematics? 	Students will use the order of operations to solve problems.	Academic/Content <ul style="list-style-type: none"> ○ order of operations ○ parentheses




	<ul style="list-style-type: none"> ○ Construct viable arguments and critique the reasoning of others. ○ Model with Mathematics. ○ Attend to precision. ○ Look for and make use of structure. 			
	Lesson 8 Hands On: Equations with Two Operations			
	<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with Mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	How are patterns used in mathematics?	Students will explore equations with two operations.	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ equation ○ operation
	Lesson 9 Equations with Multiple Operations			
	<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in rule itself.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	How are patterns used in mathematics?	Students will use tables to recognize and write equations with two or more operations.	<p>Academic/Content</p> <ul style="list-style-type: none"> ○ equation ○ operation




	<ul style="list-style-type: none"> ○ Look for and express regularity in repeated reasoning. 			
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	Chapter 8 Fractions	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Factors and Multiples			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.OA.4 Find all factor pairs for a whole number in the range of 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	How can different fractions name the same amount?	Students will find factors and multiples of whole numbers.	Academic/Content <ul style="list-style-type: none"> ○ collaborative conversations ○ factor pairs
	Lesson 2 Prime and Composite Numbers			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.OA.4 Find all factor pairs for a whole number in the range of 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range of 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range of 1-100 is prime or composite. Mathematical practices:	How can different fractions name the same amount?	Students will determine if a number is prime or composite.	Academic/Content <ul style="list-style-type: none"> ○ composite number ○ prime number

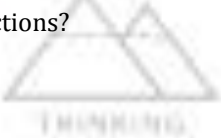
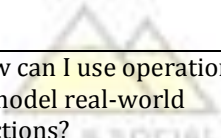
	<ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 			
	Lesson 3 Hands On: Model Equivalent Fractions			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fractions models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and express regularity in repeated reasoning. 	How can different fractions name the same amount? 	Students can explore equivalent fractions.	Academic/Content <ul style="list-style-type: none"> ○ denominator ○ equivalent fractions ○ numerator
	Lesson 4 Equivalent Fractions			
McGraw-Hill My Math: Go Digital at:	4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fractions models, with attention to how the number and size of the parts differ	How can different fractions name the same amount?	Students will find equivalent fractions.	Academic / Content <ul style="list-style-type: none"> ○ denominator



<p>Connected.mcgraw-hill.com</p>	<p>even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Look for and make use of structure. ○ Look for and express regularly in repeated reasoning. 			<ul style="list-style-type: none"> ○ equivalent fractions ○ numerator
	<p>Lesson 5 Simplest Form</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.NF.1 Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{n \times a}{n \times b}$ by using visual fractions models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics ○ Attend to precision. ○ Look for and make use of structure 	<p>How can different fractions name the same amount?</p> 	<p>Students will write a fraction in simplest form.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ greatest common factor ○ simplest form
	<p>Lesson 6 Compare and Order Fractions</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at:</p>	<p>4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or</p>	<p>How can different fractions name the same amount?</p>	<p>Students will compare and order fractions.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ least common multiple




<p>Connected.mcgraw-hill.com</p>	<p>numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when to two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. 			
	<p>Lesson 7 Use Benchmark Fractions to Compare and Order</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when to two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics ○ Use appropriate tools strategically. 	<p>How can different fractions name the same amount?</p> 	<p>Student will use benchmark fractions to compare and order numbers.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ benchmark fractions

	<ul style="list-style-type: none"> ○ Look for and make use of structure. 			
	<p>Lesson 8 Problem Solving Investigation: Use Logical Reasoning</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. 	<p>How can different fractions name the same amount?</p>  	<p>Students will use logical reasoning to solve problems.</p>	<p>Academic / Content</p>
	<p>Lesson 9 Mixed Numbers</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.NF.3b Decompose a fraction into a sum of fractions with the same denominators in more than one way, recording each decomposition by an equation. Justify decompositions, e.g. by using a visual fraction model.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. 	<p>How can different fractions name the same amount?</p> 	<p>Students will represent mixed numbers by decomposing them into a sum of whole numbers and unit fractions.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ mixed numbers

	<ul style="list-style-type: none"> ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	Lesson 10 Mixed Numbers and Improper Fractions			
	4.NF.3 Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularly in repeated reasoning. 	How can different fractions name the same amount? 	Students will write mixed numbers and improper fractions.	Academic / Content <ul style="list-style-type: none"> ○ improper fractions
	Chapter 9 Operations with Fractions	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Hands on: Use Models to Add Like Fractions			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.NF.3a Understand Addition from unit of fractions by applying and extending previous understandings of operations on whole numbers. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. 	How can I use operations to model real-world fractions?	Students will use models to add like fractions.	Academic / Content <ul style="list-style-type: none"> ○ like fractions

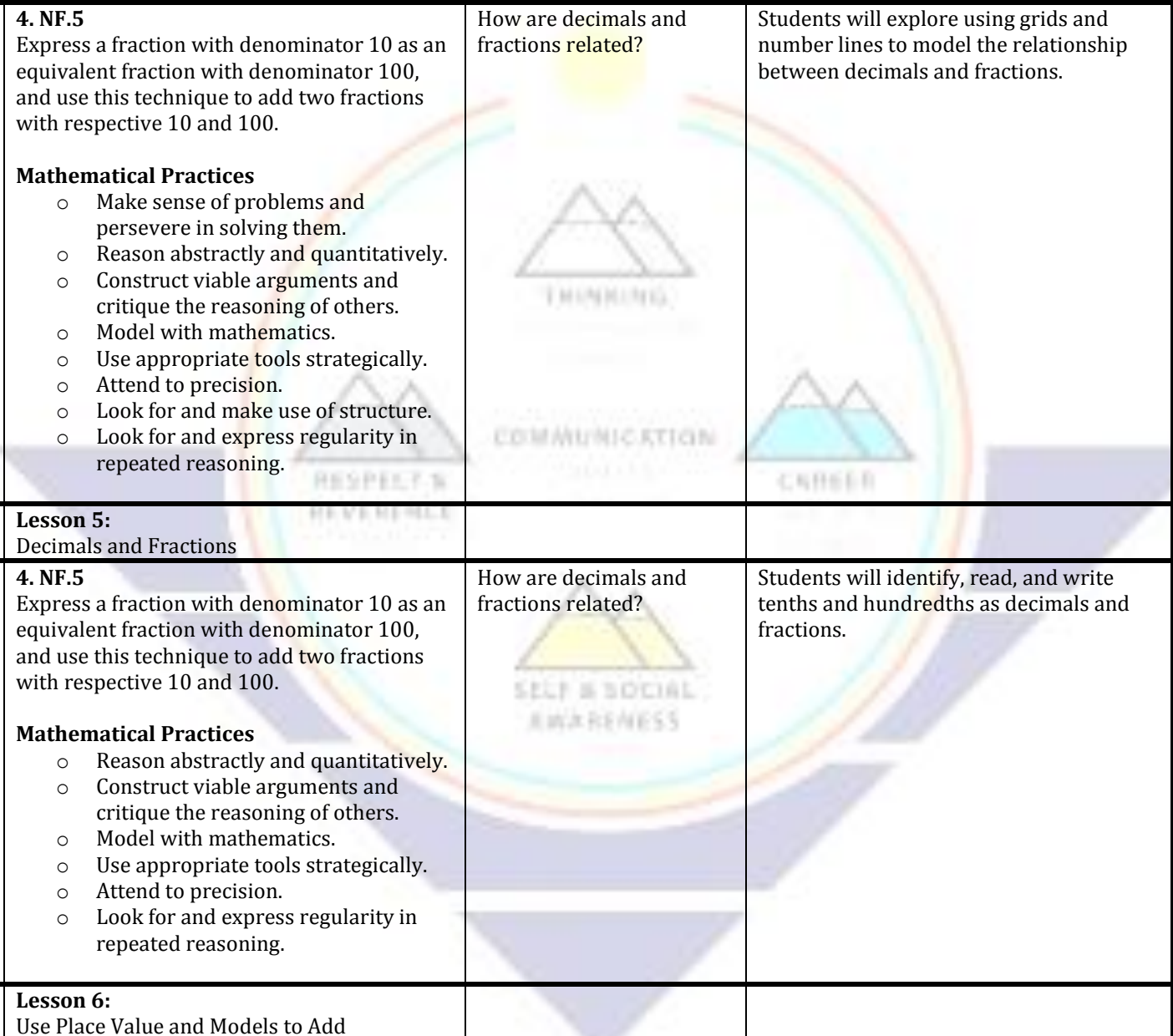
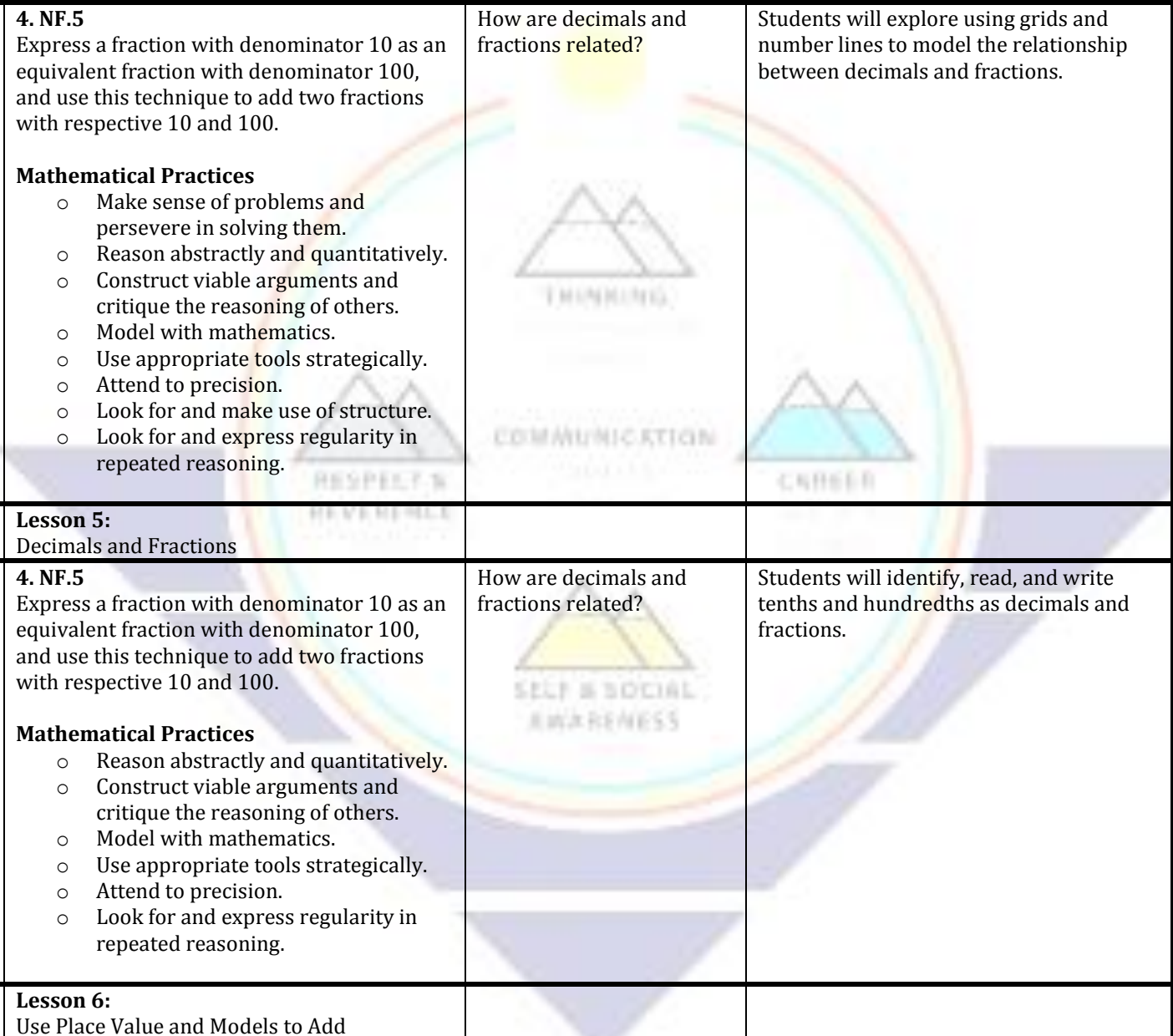
	<ul style="list-style-type: none"> ○ Look for and express regularly in repeated reasoning. 			
	Lesson 2: Add Like Fractions			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.NF.3b Decompose a fraction into a sum of fractions with the same denominators in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using visual fractions model. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	How can I use operations to model real-world fractions? 	Students will add like fractions.	Academic / Content <ul style="list-style-type: none"> ○ denominator ○ numerator ○ simplify ○ greatest common factor ○ like fractions
	Lesson 3: Hands on: Use Models to Subtract Like Fractions			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.NF.3a Understand Addition from unit of fractions by applying and extending previous understandings of operations on whole numbers. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure. ○ Look for and express regularly in repeated reasoning. 	How can I use operations to model real-world fractions? 	Students will use models to subtract like fractions.	Academic / Content <ul style="list-style-type: none"> ○ addition ○ units ○ fractions ○ operations
	Lesson 4:			




	Subtract Like Fractions			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.NF.3a Understand Addition from unit of fractions by applying and extending previous understandings of operations on whole numbers. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	How can I use operations to model real-world fractions? 	Students will subtract like fractions.	Academic / Content <ul style="list-style-type: none"> ○ like fractions ○ simplest form
	Lesson 5 Problem Solving Investigations: Work Backward			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4. NF.3d Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fractions models and equations to represent the problem. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. 	How can I use operations to model real-world fractions? 	Students will work backwards to solve problems.	Academic / Content <ul style="list-style-type: none"> ○ work backwards ○ fractions ○ denominations ○ visual models ○ equations ○ represent
	Lesson 6: Add Mixed Numbers			
McGraw-Hill My Math:	4.NF.3c Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed	How can I use operations to model real-world fractions?	Students will add mixed numbers.	Academic / Content

<p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for and make use of structure. ○ Look for and express regularly in repeated reasoning. 			<ul style="list-style-type: none"> ○ Associative Property ○ decompose equivalent fractions ○ mixed number
	<p>Lesson 7: Subtract Mixed Numbers</p>	<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.NF.3c Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for and make use of structure. ○ Look for and express regularly in repeated reasoning. 	<p>How can I use operations to model real-world fractions?</p> 	<p>Students will subtract mixed numbers.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ equivalent fractions ○ denominators ○ mixed number ○ properties ○ operations ○ addition ○ subtraction
	<p>Lesson 8 Hands on: Model Fractions and Multiplication</p>			
<p>McGraw-Hill My Math:</p>	<p>4. NF.4a Understand a fraction a/b as a multiple of $1/b$.</p>	<p>How can I use operations to model real-world fractions?</p>	<p>Students will use models to multiply fractions.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ fraction

Go Digital at: Connected.mcgraw-hill.com	Mathematical Practices: <ul style="list-style-type: none"> Reason abstractly and quantitatively. Model with mathematics. Use appropriate tools strategically. Attend to precision Look for and make sure of structure. 			<ul style="list-style-type: none"> multiple variable
	Lesson 9 Multiply Fractions by Whole Numbers			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4. NF.4b Understanding a multiple a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. Mathematical Practices: <ul style="list-style-type: none"> Make sense of problems and persevere in solving them. Reason abstractly and quantitatively. Model with mathematics. Use appropriate tools strategically. Attend to precision Look for and express regularly in repeated reasoning. 	How can I use operations to model real-world fractions?	Students will multiply fractions by whole numbers.	Academic / Content <ul style="list-style-type: none"> product multiple fraction variable
	Chapter 10 Fractions and Decimals	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Hands on: Place Value Through Tenths and Hundredths			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4. NF.6 Use decimal notation for fractions with denominators 10 or 100. Mathematical Practices <ul style="list-style-type: none"> Reason abstractly and quantitatively. Construct viable arguments and critique the reasoning of others. Model with mathematics. Use appropriate tools strategically. Attend to precision. Look for and make use of structure. 	How are decimals and fractions related?	Students will explore using place-value charts and grids to model decimals.	Academic / Content <ul style="list-style-type: none"> decimal tenth hundredths

	Lesson 2: Tenths			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4. NF.6 Use decimal notation for fractions with denominators 10 or 100. Mathematical Practices <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	How are decimals and fractions related?	Students will model and describe tenths as part of the base-ten system.	Academic / Content <ul style="list-style-type: none"> ○ tenths
	Lesson 3: Hundredths			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4. NF.6 Use decimal notation for fractions with denominators 10 or 100. Mathematical Practices <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	How are decimals and fractions related?	Students will model and describe hundredths as part of the base-ten system.	Academic / Content <ul style="list-style-type: none"> ○ hundredths
	Lesson 4: Hands on: Model Decimals and Fractions			

<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4. NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective 10 and 100.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	<p>How are decimals and fractions related?</p> 	<p>Students will explore using grids and number lines to model the relationship between decimals and fractions.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ express ○ fraction ○ denominator ○ technique ○ respective ○ equivalent
<p>Lesson 5: Decimals and Fractions</p>				
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4. NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective 10 and 100.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	<p>How are decimals and fractions related?</p> 	<p>Students will identify, read, and write tenths and hundredths as decimals and fractions.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ fraction ○ denominator ○ technique ○ respective ○ equivalent
<p>Lesson 6: Use Place Value and Models to Add</p>				

<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4. NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective 10 and 100.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	<p>How are decimals and fractions related?</p> 	<p>Student will use place value and equivalent fractions to add two fractions with respective denominators 10 and 100.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ like fractions ○ denominator ○ technique ○ respective ○ fraction ○ equivalent
<p>Lesson 7 Compare and Order Decimals</p>		<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4. NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, $<$, and justify the conclusions, e.g., by using a visual model.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for and make use of structure. 	<p>How are decimals and fractions related?</p> 	<p>Students will compare and order decimals to hundredths by reasoning about their size.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ Place Value ○ decimal ○ comparisons ○ justify ○ visual model ○ hundredths ○ reasoning ○ record
<p>Lesson 8 Problem Solving Investigations: Extra or Missing Information</p>				

<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4. NF.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective 10 and 100.</p> <p>Mathematical Practices</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	<p>How are decimals and fractions related?</p>	<p>Students will find extra or missing information when solving problems.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ express ○ fraction ○ denominator ○ technique ○ respective
<p>Quarter 3 Jan to March</p>	<p>Domain: Measurement and Data</p> <ul style="list-style-type: none"> ○ Chapter 11 Customary Measurement ○ Chapter 12 Metric Measurement ○ Chapter 13 Perimeter and Area 	<p>Domain: Geometry</p> <ul style="list-style-type: none"> ○ Chapter 14 Geometry 		
	<p>Chapter 11 – Customary Measurement</p>	<p>Essential Question</p>	<p>Learning Objectives</p>	<p>Vocabulary</p>
	<p>Lesson 1 Customary Units of Length</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units within one system of units (including km, m, cm; kg, g, lb. oz; l, ml; hr, min, sec.). Within a single system of measurement, express measurement in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	<p>Why do we convert measurement?</p>	<p>Students will estimate and measure length using customary units.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ customary system ○ yard (yd) ○ foot (ft)






	<ul style="list-style-type: none"> ○ Look for and make use of structure. 			
	<p>Lesson 2 Convert Customary Units of Length</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml;; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>Why do we convert measurement?</p>	<p>Students will convert customary units of length</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ convert ○ mile (mi.)
	<p>Lesson 3 Customary Units of Capacity</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml;; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. 	<p>Why do we convert measurement?</p>	<p>Students will estimate and measure customary capacities.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ capacity ○ cup (c) ○ fluid ounce (fl oz) ○ gallon (ga.) ○ pint (pt) ○ quart (qt)

	<ul style="list-style-type: none"> ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 4 Convert Customary Units of Capacity</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml,; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>Why do we convert measurement?</p>	<p>Students will convert customary units of capacity.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ capacity ○ convert ○ is equal to (=) ○ is greater than (>) ○ is less than (<)
	<p>Lesson 5 Customary Units of Weight</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml,; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p>	<p>Why do we convert measurement?</p>	<p>Students will estimate and measure customary units of weight.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ ounce ○ pound ○ ton ○ weight



	<p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 6 Convert Customary Units of Weight</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>Why do we convert measurement?</p>	<p>Students will convert customary units of weight.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ capacity ○ convert ○ ounce ○ pound ○ ton ○ weight
	<p>Lesson 7 Convert Units of Time</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p>	<p>Why do we convert measurement?</p>	<p>Students will convert units of time</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ seconds ○ minutes ○ hour ○ time ○ Analog time ○ digital time

	<ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	<p>Lesson 8 Display Measurement Data in a Line Plot</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	<p>Why do we convert measurement?</p>	<p>Students will display measurement data in a line plot.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ line plot ○ data ○ tally
	<p>Lesson 9 Solve Measurement Problems</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. 	<p>Why do we convert measurement?</p>	<p>Students will solve problems involving measurement.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ fraction




	<ul style="list-style-type: none"> ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 			
	Lesson 10 Problem – Solving Investigation: Guess, Check, and Revise			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml;; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. 	Why do we convert measurement? 	Students will solve problems using the guess, check, and revise strategy.	Academic / Content <ul style="list-style-type: none"> ○ Guess, check, and revise strategy
	Chapter 12 – Metric Measurement	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Metric Units of Length			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.MD.1 Know relative sizes of measurement units Within one system of measurement (including km, m, com, kg, g; lb., oz; l, ml;; hr, min, sec.) Within a single system of measurements, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. 4.MD.2 Use the four operations to solve word problems involving distances, intervals to	How can conversion of measurements help me solve real-world problems? 	Students will estimate and measure lengths within the metric systm	Academic / Content <ul style="list-style-type: none"> ○ centimeter ○ kilometer ○ meter ○ metric system ○ millimeter

	<p>time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurement given in larger unit in terms of s smaller unit.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 			
	<p>Lesson 2 Metric Units of Capacity</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.2 Use the four operations to solve word problems involving distances, intervals to time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurement given in larger unit in terms of s smaller unit.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Look for and express regularity in repeated reasoning. 	<p>How can conversion of measurements help me solve real-world problems?</p> 	<p>Students will estimate and measure metric capacities.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ liter (L) ○ milliliter (mL)
	<p>Lesson 3 Metric Units of Mass</p>			

<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.2 Use the four operations to solve word problems involving distances, intervals to time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurement given in larger unit in terms of s smaller unit.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	<p>How can conversion of measurements help me solve real-world problems?</p>	<p>Students will estimate and measure mass and learn the difference between weight and mass.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ gram ○ kilogram ○ mass
	<p>Lesson 4 Problem – Solving Investigation: Make an Organized List</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.2 Use the four operations to solve word problems involving distances, intervals to time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurement given in larger unit in terms of s smaller unit.</p> <p>Mathematical practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. 	<p>How can conversion of measurements help me solve real-world problems?</p>	<p>Students will make an organized list to solve problems.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ organize ○ combination
	<p>Lesson 5 Convert Metric Units</p>			




<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.2 Use the four operations to solve word problems involving distances, intervals to time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurement given in larger unit in terms of a smaller unit.</p> <p>Mathematical practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Attend to precision. 	<p>How can conversion of measurements help me solve real-world problems?</p> 	<p>Students will convert metric units.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ convert ○ symbols
	<p>Lesson 6 Solve Measurement Problems</p>	<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.2 Use the four operations to solve word problems involving distances, intervals to time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurement given in larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.</p> <p>Mathematical practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Attend to precision. 	<p>How can conversion of measurements help me solve real-world problems?</p> 	<p>Students will solve problems involving measurement.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ Metric system ○ convert ○ capacity ○ length ○ mass ○ units ○ record measurement ○ equivalent ○ operations ○ intervals
	<p>Chapter 13 Perimeter and Area</p>	<p>Essential Question</p>	<p>Learning Objectives</p>	<p>Vocabulary</p>
	<p>Lesson 1 Perimeter</p>			

<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	<p>Why is it important to measure perimeter and area?</p>	<p>Students will find the perimeter of a figure.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ perimeter ○ distance ○ length ○ width
	<p>Lesson 2 Problem-Solving Investigation: Solve a simpler Problem.</p>	<p>COMMUNICATION</p>		
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Construct viable arguments and critique the reasoning of others. ○ Reason abstractly and quantitatively. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	<p>Why is it important to measure perimeter and area?</p>	<p>Students will solve a simpler problem to solve problems.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ perimeter ○ units
	<p>Lesson 3 Hands On: Model Area</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at:</p>	<p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</p>	<p>Why is it important to measure perimeter and area?</p>	<p>Students will explore the area of a figure.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ area ○ square unit



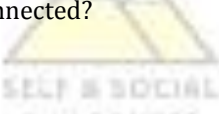
<p>Connected.mcgraw-hill.com</p>	<p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 			<ul style="list-style-type: none"> ○ unit square
	<p>Lesson 4 Measure Area</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</p> <p>Mathematical practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematic. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	<p>Why is it important to measure perimeter and area?</p>	<p>Students will find the area of rectangles and squares.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ area ○ perimeter ○ formula
	<p>Lesson 5 Relate Area and Perimeter</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Make sense of problems and persevere in solving them. 	<p>Why is it important to measure perimeter and area?</p>	<p>Students will relate area to perimeter.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ area ○ perimeter

	<ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Attend to precision. 			
	Chapter 14 – Geometry	Essential Question	Learning Objectives	Vocabulary
	Lesson 1 Draw Points, Lines, and Rays.			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Connect viable argument and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. 	How are different ideas about geometry connected?	Students will draw points, lines, line segments, and rays and identify these in two-dimensional figures.	Academic / Content <ul style="list-style-type: none"> ○ line ○ line segment ○ endpoint ○ point ○ ray
	Lesson 2 Draw Parallel and Perpendicular Lines			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Make sense of problems and persevere. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	How are different ideas about geometry connected?	Students will draw parallel, intersecting, and perpendicular lines and identify these in two-dimensional figures.	Academic / Content <ul style="list-style-type: none"> ○ parallel ○ perpendicular ○ intersecting

	Lesson 3 Hands On: Model Angles			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.MD.5a An angle is measured with reference to a circle with its center at the common endpoints of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Make sense of problems and persevere to solving them. ○ Connect viable argument and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and express regularity in repeated reasoning. 	How are different ideas about geometry connected?	Students will understand concepts of angles and angle measurement.	Academic / Content <ul style="list-style-type: none"> ○ angle
	Lesson 4 Classify Angles			
	4.MD.5b An angle that turns through n one-degree angles is said to be have an angle measure of n degrees. Mathematical Practices: <ul style="list-style-type: none"> ○ Make sense of problems and persevere to solving them. ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. 	How are different ideas about geometry connected?	Students will use concepts of angle measurements to classify angles.	Academic / Content <ul style="list-style-type: none"> ○ degree ○ one-degree angle ○ right angle ○ acute angle ○ obtuse angle
	Lesson 5 Measure Angles			

	<p>4.MD.6 Measure angles in whole number degree using a protractor.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Construct viable arguments and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure 	<p>How are different ideas about geometry connected?</p> 	<p>Students will use a protractor to measure angles to the nearest degrees.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ angle ○ degree
	<p>Lesson 6 Draw Angles</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Construct viable arguments and critique the reasoning of others. ○ Use appropriate tools strategically. ○ Attend to precision. 	<p>COMMUNICATION</p> 	<p>Students will use a protractor to draw angles of a specified measure.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ angle ○ ray
	<p>Lesson 7 Solve Problems with Angles</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Connect viable argument and critique the reasoning of others. ○ Model with mathematics. 	<p>How are different ideas about geometry connected?</p> 	<p>Students will solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical situations.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ angle ○ ray

	<ul style="list-style-type: none"> ○ Use appropriate tools strategically. ○ Attend to precision. 			
	Lesson 8 Triangles			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangle. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Connect viable argument and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure 	How are different ideas about geometry connected?	Students will classify triangles based on angle measure and describe triangles using their attributes.	Academic / Content <ul style="list-style-type: none"> ○ acute triangle ○ obtuse triangle ○ right triangle
	Lesson 9 Quadrilaterals			
McGraw-Hill My Math: Go Digital at: Connected.mcgraw-hill.com	4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Mathematical Practices: <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Look for and make use of structure ○ Look for and make use of structure. ○ Attend to precision. 	How are different ideas about geometry connected?	Students will classify quadrilaterals using their attributes.	Academic / Content <ul style="list-style-type: none"> ○ parallelogram ○ rectangle ○ rhombus ○ trapezoid ○ square

	<p>Lesson 10 Draw Lines of Symmetry</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Connect viable argument and critique the reasoning of others. ○ Model with mathematics. ○ Attend to precision. ○ Look for and make use of structure. 	<p>How are different ideas about geometry connected?</p>  <p>THINKING</p>  <p>COMMUNICATION</p>	<p>Students will identify figures with line symmetry and draw lines of symmetry.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ line of symmetry ○ line symmetry
	<p>Lesson 11 Problem-Solving Investigation: Make a Model</p>			
<p>McGraw-Hill My Math:</p> <p>Go Digital at: Connected.mcgraw-hill.com</p>	<p>4.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines. Identify these in two-dimensional figures.</p> <p>Mathematical Practices:</p> <ul style="list-style-type: none"> ○ Reason abstractly and quantitatively. ○ Make sense of problems and persevere ○ Connect viable argument and critique the reasoning of others. ○ Model with mathematics. ○ Use appropriate tools strategically. ○ Attend to precision. ○ Look for and make use of structure. ○ Look for and express regularity in repeated reasoning. 	<p>How are different ideas about geometry connected?</p>  <p>SELF & SOCIAL AWARENESS</p>	<p>Students will solve problems by making a model.</p>	<p>Academic / Content</p> <ul style="list-style-type: none"> ○ angles ○ line ○ line-segment ○ perpendicular lines ○ parallel lines

	<p>Review and Assessments</p> <ol style="list-style-type: none"> 1. Reteach specific standards 2. ATI-Galileo Math Benchmark 3. Az-Merit Math 4. Class Tests 5. 			
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