

FIFTH GRADE MATH CURRICULUM

Math Unit: 1		Pacing Guide: September
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> • How can you describe the relationship between two place-value positions? • How can you use an exponent to show powers of 10? • How do you multiply by 1-digit and 2-digit numbers? • How is multiplication used to solve a division problem? • How can you use the strategy <i>solve a simpler problem</i> to help you solve a division problem? • How can you use a numerical expression to describe a situation? • In what order must operations be evaluated to find the solution to a problem? • In what order must operations be evaluated to find a solution when there are parentheses within parentheses? 	<ul style="list-style-type: none"> • I can recognize the 10 to 1 relationship between two place-value positions. • I can write and evaluate repeated factors in exponent form. • I can multiply by 1-digit and 2-digit numbers? • I can use multiplication to solve division problems. • I can use the strategy <i>solve a simpler problem</i> to solve problems. • I can use order of operations to evaluate numerical expression. • I can evaluate numerical expressions with parentheses, brackets, and braces. • I can write numerical expressions. 	<ul style="list-style-type: none"> • SWBAT complete an assessment that requires them to describe the relationship between two place-value positions and use exponents to show powers of 10 with 80% accuracy. (5.NBT.A.2) • SWBAT complete an assessment that requires them to multiply multi digit numbers with 80% accuracy. (5.NBT.B.5) • SWBAT complete an assessment that requires them to write and solve numerical expressions using order of operations with 80% accuracy. (5.OA.A.1, 5.OA.A.2)
Suggested Activities		
<ul style="list-style-type: none"> • Beginning of year assessment 		

FIFTH GRADE MATH CURRICULUM

- Show What You Know diagnostics test
- Real World Project: (extending division to 2-digit divisors, integrating decimal factors into the place value system and developing understanding of operations with decimals to the hundredths, and developing fluency with whole number and decimal operations).
- Going to London, England Game
- The Write Way Journal Entry
- Grab and Go Activity 1 “Form Fun”
 - Write whole numbers in standard and expanded forms focusing on zero as a placeholder
- Grab and Go activity 1 “Number Explosion”
 - Write whole numbers in standard, expanded, and word form
- Grab and Go activity 11 “Amazing Areas”
 - Measure and calculate the area of rectangles
- Grab and Go activity 11 “Multiplication Relay”
 - Work in teams to solve multiplication problems
- Grab and Go activity 11 “Special 5”
 - Estimate and find products of two-digit by two-digit multiplication
- Grab and Go activity 15 “15 Minute March”
 - Find how many 15-minute time increments are in a given length of time
- Grab and Go game “What’s Left?”
 - Write and solve division problems to make a specific remainder
- Chapter 1 Performance Task
- Literature: Niagara Falls Numbers, A Drive Through History

Reinforcement	Enrichment
<ul style="list-style-type: none"> ● Reteach worksheet pages (chapter resources book) ● Personal Math Trainer (Think Central) ● Math On the Spot videos ● Response to Intervention Activities (Think Central) ● ELL Activities ● Strategic Intervention Guide (Think Central) ● Intensive Intervention Guide (Think Central) ● Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> ● Enrich worksheet pages (chapter resources book) ● Advanced Learners Activities ● Extend the Project Activities (Real World/Critical Area Project- In book & Think Central) ● Chapter 1 STEM Activities: Smart choices/activity 3(Think Central) ● Student workbook Critical Area Projects pg. B1-B2 (via Think Central). ● Online Activities: <ul style="list-style-type: none"> ● Multiplication Board Game - http://www.math-play.com/Multiplication-Board-Game/multiplying-by-big-numbers_html5.html ● Place Value Interactive Word Search - http://www.math-play.com/place-value-word-search/place-value-word-search.html

FIFTH GRADE MATH CURRICULUM

	<ul style="list-style-type: none"> ● Solving Equations - https://www.education.com/game/solving-equations/ ● Classroom Activities: <ul style="list-style-type: none"> ● Think Central: <ul style="list-style-type: none"> ○ Knowledge Grows • Communicating Scientific Knowledge ○ Field Trips • Do the Math!–Estimate by Sampling ○ Smart Choices • Promotional Labels ○ Lenses • Convex and Concave Lenses ○ The More You Grow • Do the Math!–Interpret a Table ○ The Sun-Earth-Moon System • Do the Math!–Calculate Circumference ● WANTED Poster Project ● The Foot, the Whole Foot, and Nothing but the Foot!- Projetc ● Directed Paraphrasing ● Journal entries ● For details on above projects and additional activities see: https://docs.google.com/document/d/18zYmp71VXj7KHOCODMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks 	<ul style="list-style-type: none"> ● Beginning-of-Year Assessment ● Mid-Chapter Checkpoint (Chp.1) ● Chapter 1 Test ● Spiral Review pages ● teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> ● First in math games: http://www.firstinmath.com/ ● Illuminations: https://illuminations.nctm.org/ ● Kahn Academy: www.kahnacademy.org ● Think Central: https://www-k6.thinkcentral.com 	<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks
Standards	

FIFTH GRADE MATH CURRICULUM

5.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left.

5.NBT.A.2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

5.NBT.B.5 Fluently multiply multi-digit whole number using the standard algorithm.

5.NBT.B.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-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.

5.OA.A.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

5.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. *For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.*

Cross-Curricular Connections

21st Century Skills: *CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere*

Technology: *8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.*

SEL: *Develop, implement and model effective problem solving and critical thinking skills.*

Language Arts: *W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.*

Math Unit: 2		Pacing Guide: October
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> How can you solve and 	<ul style="list-style-type: none"> I can divide 3- and 4- 	<ul style="list-style-type: none"> SWBAT complete an assessment to find whole-number quotients

FIFTH GRADE MATH CURRICULUM

<p>check division problems?</p> <ul style="list-style-type: none"> • How can you use base-ten blocks to model and understand division of whole numbers? • How can you divide by 2-digit divisors? • How can you use numbers to estimate quotients? • How can the strategy <i>draw a diagram</i> help you solve a division problem? 	<p>digit dividends by 1-digit divisors.</p> <ul style="list-style-type: none"> • I can model division with 2-digit divisors using base-ten blocks. • I can divide by two-digit divisors. • I can estimate quotients by using compatible numbers. • I can solve problems by using the strategy <i>draw a diagram</i>. 	<p>of whole numbers with up to four-digit dividends and two-digit divisors with 80% accuracy (5.NBT.B.6)</p>
<p>Suggested Activities</p>		
<ul style="list-style-type: none"> • Show What You Know • Game “Matchup” <ul style="list-style-type: none"> ○ • The Write Way writing prompt • Grab and Go activity 15 “Divide and Conquer” <ul style="list-style-type: none"> ○ Students make and solve problems with 3-digit dividends and 2-digit divisors • Grab and Go activity 15 “15 Minute March” <ul style="list-style-type: none"> ○ Students find how many 15-minute time increments are in a given length of time • Grab and Go activity 15 “Decide and DIdive” <ul style="list-style-type: none"> ○ Students estimate quotients and then divide 3-digit dividends by 2-digit divisors • Literature – A Drive through History , Niagara Falls Numbers. • Grab and Go game “What’s Left?” <ul style="list-style-type: none"> ○ Students write and solve division problems to make a specific remainder. • Chapter 2 Performance Task 		
<p>Reinforcement</p>	<p>Enrichment</p>	
<ul style="list-style-type: none"> • Reteach worksheet pages (chapter resources book) • Persona Math Trainer (Think Central) • Math On the Spot videos • Response to Intervention Activities (Think Central) • ELL Activities • Strategic Intervention Guide (Think Central) 	<ul style="list-style-type: none"> • Enrich worksheet pages (chapter resources book) • Advanced Learners Activities • Chapter 2 STEM Activities: Super Models choices/activity 3 (Think Central) • Online Activities: <ol style="list-style-type: none"> 1) Estimate Quotients Game - http://www.math- 	

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> • Intensive Intervention Guide (Think Central) • Screen and implement Tier 2 interventions 	<p>play.com/estimate-quotients-halloween-math-game/estimate-quotients-math-monsters-game.html</p> <p>2) Division Derby - https://www.mathplayground.com/ASB_Division_Derby.html</p> <p>3) Demolition Derby - https://www.mathplayground.com/ASB_DemolitionDivision.html</p> <p>4) Math Monster Division - https://www.mathplayground.com/math_monster_division.html</p> <p>5) Drag Race Division - https://www.mathplayground.com/ASB_DragRaceDivision.html</p> <ul style="list-style-type: none"> • Classroom Activities: <ul style="list-style-type: none"> • Think Central: Super Models • Types Models Into the Lab • Lab Tools Wonderful Water • Do the Math!—Solve Real World Problems • Tic- Tac- Toe Choice Board • Use Multiplication and Division Properties: Share word problems • Digit Detectives Project <ul style="list-style-type: none"> ○ For details on above projects and additional activities see: https://docs.google.com/document/d/18zYmp71VXj7KHOCODMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
<p>Materials and Resources</p>	<p>Other Assessments</p>
<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks 	<ul style="list-style-type: none"> • Mid-Chapter Checkpoint (Chp.2) • Chapter 2 Test • Spiral Review pages • teacher generated assessments/activities

FIFTH GRADE MATH CURRICULUM

Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • First in math games: http://www.firstinmath.com/ • Illuminations: https://illuminations.nctm.org/ • Think Central - https://www-k6.thinkcentral.com • Kahn Academy- www.kahnacademy.org • Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks
Standards	
<p>5.NBT.B.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-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>	
Cross-Curricular Connections	
<p>21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere</p> <p>Technology Standards: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</p> <p>SEL: Develop, implement, and model effective problem solving and critical thinking skills.</p> <p>Language Arts: W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.</p>	

Math Unit: 3		Pacing Guide: November
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> • How do you read, write, and represent decimals through the thousands? • How can you use place value to compare and order decimals? 	<ul style="list-style-type: none"> • I can read, write, and represent decimals through the thousands. • I can compare and order decimals to thousands using place 	<ul style="list-style-type: none"> • SWBAT complete an assessment to read, write, compare, and order decimals using the place value system with 80% accuracy. (5.NBT.A.3ab)

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> • How can you use base-ten blocks to model decimal addition? • How can place value help you add and subtract decimals?? • How can you use addition or subtraction to describe a pattern or create a sequence with decimals? • Which method could you choose to find decimal sums and differences? 	<p>value.</p> <ul style="list-style-type: none"> • I can model decimal addition using base-ten blocks. • I can add and subtract decimals using place value. • I can identify, describe, and create numeric patterns with decimals. • I can choose a method to find a decimal sum or difference. 	
Suggested Activities		
<ul style="list-style-type: none"> • Show What You Know • Grab and Go Activity Card 4 “Do We Decimal?” <ul style="list-style-type: none"> ○ Students draw models of decimals and represent the models as decimals and as fractions • Grab and Go Activity Purple Card 5 “Decimal Display” <ul style="list-style-type: none"> ○ Students use 10x10 grids to model adding decimals • Grab and Go Activity Blue Card 5 “Get Around” <ul style="list-style-type: none"> ○ Students add decimals to find the perimeter of classroom objects • Grab and Go Activity Orange Card 5 “Get Around” <ul style="list-style-type: none"> ○ Students find decimal addends that equal a given sum • Grab and Go Readers- Dewey and His Decimals, Halfpipe, A Hundredth of a Second • Grab and Go game:- “Decimal Challenge” <ul style="list-style-type: none"> ○ Students name a decimal greater than, less than, or equal to the given decimal • Grab and Go game:- “Ride the Course” <ul style="list-style-type: none"> ○ Students add or subtract decimals to move ahead on the course. • Chapter 2 Performance Task 		
Reinforcement	Enrichment	
<ul style="list-style-type: none"> • Reteach worksheet pages (chapter resources book) • Personal Math Trainer (Think Central) • Math On the Spot videos 	<ul style="list-style-type: none"> • Enrich worksheet pages (chapter resources book) • Advanced Learners Activities • STEM activities (Think Central) 	

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> ● Response to Intervention Activities (Think Central) ● ELL Activities ● Strategic Intervention Guide (Think Central) ● Intensive Intervention Guide (Think Central) ● Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> ● Online Activities: <ul style="list-style-type: none"> ● Adding Decimals - https://www.education.com/games/fifth-grade/addition/?q=decimals ● Adding Decimals Basketball - http://www.math-play.com/adding-decimals-basketball/adding-decimals-basketball-game.html ● Subtracting Decimals - http://www.math-play.com/subtracting-decimals-game/subtracting-decimals-soccer.html ● Classroom Activities: <ul style="list-style-type: none"> ● Think Central: <ul style="list-style-type: none"> ○ Home Circuits • Do the Math!–Interpret a Simple Graph ○ Oceans Rising • Changes in Sea Levels ○ The Sun and the Sea • Do the Math!–Interpret a Table ● School Festival Project ● “Let’s Make a Guess” Activity ● For details on above projects and additional activities see: https://docs.google.com/document/d/18zYMp71VXj7KHOCoDMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks 	<ul style="list-style-type: none"> ● Mid-Chapter Checkpoint (Chp.3) ● Chapter 3 Test ● Spiral Review pages ● teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> ● First in math games: http://www.firstinmath.com/ ● Illuminations: https://illuminations.nctm.org/ ● Kahn Academy: www.kahnacademy.org ● Think Central: https://www-k6.thinkcentral.com ● Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks
Standards	

FIFTH GRADE MATH CURRICULUM

- 5.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.
- 5.NBT.A.3 Read, write, and compare decimals to thousandths.
- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 9 \times (1/100) + 2 \times (1/1000)$.
 - Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- 5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Cross-Curricular Connections

21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere.

Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.

SEL: Develop, implement and model effective problem solving and critical thinking skills.

Language Arts: W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.

Math Unit: 4		Pacing Guide: December
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> How can you use a model, properties, and place value to multiply a whole number and a decimal or a decimal and a decimal? How can you use expanded form and place value to multiply a decimal and a whole number? 	<ul style="list-style-type: none"> I can use a model, properties, and place value to multiply decimals. I can use expanded form and place value to multiply decimals. I can use the strategy <i>draw a diagram</i> to 	<ul style="list-style-type: none"> SWBAT complete an assessment to recognize that a digit in one place value represents 10 times as much as the digit to its right and $1/10$ as much as the digit to the left with 80% accuracy. (5.NBT.A.1) SWBAT complete an assessment that requires them to describe the relationship between two place-value positions and use exponents to show powers of 10 with 80% accuracy. (5.NBT.A.2)

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> • How can the strategy <i>draw a diagram</i> help you solve a decimal multiplication problem? • What strategies can you use to place a decimal point in a product? • How do you know you have the correct number of decimal places in your product? 	<p>solve decimal multiplication problem.</p> <ul style="list-style-type: none"> • I can use various strategies to place a decimal point in a product. • I can multiply decimals with zeros in the product. 	
Suggested Activities		
<ul style="list-style-type: none"> • Show What You Know • Grab and Go activity card 4- “One Form to Another” <ul style="list-style-type: none"> ○ Students write money amounts as decimals and fractions • Grab and Go activity card 13 - “Dueling Decimals” <ul style="list-style-type: none"> ○ Students write and solve decimal multiplication problems that include zeros in the factors • Grab and Go Reader – Doubling Every Day • Grab and Go game “Powerful Products” <ul style="list-style-type: none"> ○ Students use 4 numbers to create two decimal factors with the greatest possible product • Chapter 4 Performance Task 		
Reinforcement		Enrichment
<ul style="list-style-type: none"> • Reteach worksheet pages (chapter resources book) • Personal Math Trainer (Think Central) • Math On the Spot videos • Response to Intervention Activities (Think Central) • ELL Activities • Strategic Intervention Guide (Think Central) • Intensive Intervention Guide (Think Central) 		<ul style="list-style-type: none"> • Enrich worksheet pages (chapter resources book) • Advanced Learners Activities • Chapter 4 STEM Activities: Invasive Species/activity 6 (Think Central) • Online Activities: <ul style="list-style-type: none"> • Multiplying Decimals in Science -

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> • Screen and implement Tier 2 interventions 	<p>https://www.education.com/game/beaker-transport/</p> <ul style="list-style-type: none"> • Classroom Activities: <ul style="list-style-type: none"> • Think Central: <ul style="list-style-type: none"> • Home Circuits • Do the Math!–Interpret a Simple Graph • Oceans Rising • Changes in Sea Levels • The Sun and the Sea • Do the Math!–Interpret a Table • Design your own Activity • Table Area Problem Project • For details on above projects and additional activities see: https://docs.google.com/document/d/18zYMP71VXj7KHOCODMRRoVI26Fb41NhU3MtZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks 	<ul style="list-style-type: none"> • Mid-Chapter Checkpoint (Chp.4) • Chapter 4 Test • Spiral Review pages • teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • First in math games: http://www.firstinmath.com/ • Illuminations: https://illuminations.nctm.org/ • Kahn Academy: www.khanacademy.org • Think Central: https://www-k6.thinkcentral.com • Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks
Standards	
<p>5.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.</p> <p>5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</p>	
Cross-Curricular Connections	

FIFTH GRADE MATH CURRICULUM

21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere
Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.
SEL: Develop, implement and model effective problem solving and critical thinking skills.
Language Arts: W.5.2.d.: Use precise language and domain- specific vocabulary to inform about or explain the topic.

Math Unit: 5		Pacing Guide: December-January
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> ● How can you use a model to divide a decimal by a whole number and divide by a decimal? ● How can you estimate decimal quotients? ● How can the strategy <i>work backwards</i> help you solve a multistep decimal problem? ● When do you write a zero in the dividend to find a quotient? 	<ul style="list-style-type: none"> ● I can use a model to divide a decimal by a whole number and divide by a decimal. ● I can estimate decimal quotients. ● I can use the strategy <i>work backwards</i> to solve multi step decimal problems. ● I can write a zero in the dividend to find a quotient. 	<ul style="list-style-type: none"> ● SWBAT complete an assessment to add ,subtract, multiply, and divide decimals to the hundredths, using concrete models or drawings with 80% accuracy (5NBT.B.7)

FIFTH GRADE MATH CURRICULUM

Suggested Activities

- Show What You Know
- The Write Way writing activity
- Grab and Go orange activity card 17- “D is for...”
 - Students make and solve decimal division equations
- Grab and Go blue activity card 17 - “Centimeter Division”
 - Students divide line segments to solve problems involving the division of decimal numbers by whole numbers
- Grab and Go purple activity card 17- “Grid It”
 - Students use grids to model dividing a decimal number by another decimal number
- Grab and Go Reader – Seeking the Lowest Price
- Grab and Go game “Match Up”
 - Students match cards showing decimal division with corresponding cards showing compatible numbers and estimates of quotients
- Critical Area Performance Task 1
- Chapter 5 Performance Task

Reinforcement

- Reteach worksheet pages (chapter resources book)
- Personal Math Trainer (Think Central)
- Math On the Spot videos
- Response to Intervention Activities (Think Central)
- ELL Activities
- Strategic Intervention Guide (Think Central)
- Intensive Intervention Guide (Think Central)
- Screen and implement Tier 2 interventions

Enrichment

- Enrich worksheet pages (chapter resources book)
- Advanced Learners Activities
- Chapter 5 STEM Activities: Populations and Communities/activity 1 (Think Central)
- Online Activities:
 - Divide Decimals - <https://www.education.com/game/treasure-diving-rounding-decimals-to-the-nearest-hundredth/>
 - Decimal Division - <https://www.education.com/game/decimal-division-hundredths/>
- Classroom Activities:
 - Think Central:
 - [Population and Communities • Do the Math!-Calculate Area](#)
 - [Living Things Change • Do the Math!-Find Median and Mean](#)
 - Design your own Activity
 - Exploration Activity
 - For details on above projects and additional activities see:

FIFTH GRADE MATH CURRICULUM

	https://docs.google.com/document/d/18zYmp71VXj7KHOCoDMRRoVI26Fb41NhU3MtZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks 	<ul style="list-style-type: none"> • Mid-Chapter Checkpoint (Chp.5) • Chapter 5 Test • Spiral Review pages • teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • First in math games: http://www.firstinmath.com/ • Illuminations: https://illuminations.nctm.org/ • Splash Learn - www.splashlearn.com • Think Central https://www-k6.thinkcentral.com • Kahn Academy- www.kahnacademy.org 	<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks
Standards	
5.NBT.B.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
Cross-Curricular Connections	
<p>21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere</p> <p>Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</p> <p>SEL: Develop, implement and model effective problem solving and critical thinking skills.</p> <p>Language Arts: W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.</p>	

FIFTH GRADE MATH CURRICULUM

Math Unit: 6		Pacing Guide: January-February
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> • How can I use a common denominator to add and subtract fractions with unlike denominators? • How can you use models to add and subtract fractions and mixed numbers that have different denominators? • How can you use renaming to find the difference of two mixed numbers? • How can the strategy <i>work backward</i> help you solve a problem with fractions that involves addition and 	<ul style="list-style-type: none"> • I can use models to add and subtract fractions and mixed numbers that have different denominators. • I can use renaming to find the difference of two mixed numbers. • I can use the strategy <i>work backward</i> to solve a problem with fractions that involves. Addition and subtraction. • I can use properties to help me add fractions 	<ul style="list-style-type: none"> • SWBAT complete a practice test to add and subtract fractions with unlike denominators using common denominators with 80% accuracy. (5.NF.A.1) • SWBAT complete a practice test to solve word problems involving addition and subtraction of fractions with 80% accuracy. (5.NF.A.2)

FIFTH GRADE MATH CURRICULUM

subtraction? <ul style="list-style-type: none"> How can properties help you add fractions with unlike denominators? 	with unlike denominators.	
Suggested Activities		
<ul style="list-style-type: none"> Grab and Go orange activity card 8 - “Plan a Schedule” <ul style="list-style-type: none"> Students add fractions and mixed numbers to create a schedule Grab and Go blue activity card 8- “Mixed Measures” <ul style="list-style-type: none"> Students use rulers to model adding mixed numbers Grab and Go purple activity card 8 “Pattern Block Mix-Up” <ul style="list-style-type: none"> Students write and solve addition equations with fractions and mixed numbers Grab and Go Readers – Fractions Add Up!, Fossil Hunters, and Table Soccer, Anyone? Grab and Go games <ul style="list-style-type: none"> “Picture Problems” <ul style="list-style-type: none"> Students match pictorial models to subtract fractions and mixed numbers with unlike denominators “What’s the difference?” <ul style="list-style-type: none"> Students use number cards to make two fractions with the least possible difference Chapter 6 Performance Task 		
Reinforcement		Enrichment
<ul style="list-style-type: none"> Reteach worksheet pages (chapter resources book) Personal Math Trainer (Think Central) Math On the Spot videos Response to Intervention Activities (Think Central) ELL Activities Strategic Intervention Guide (Think Central) Intensive Intervention Guide (Think Central) Screen and implement Tier 2 interventions 		<ul style="list-style-type: none"> Enrich worksheet pages (chapter resources book) Advanced Learners Activities Chapter 6 STEM Activities: Resources on the Move/activity 1 (Think Central) Online Activities: <ul style="list-style-type: none"> Visual Fractions - https://www.mathplayground.com/visual_fractions.html Number Bonds Fractions - https://www.mathplayground.com/number_bonds_fractions.html Teeth Fractions - https://www.education.com/game/teeth-fractions/ Classroom Activities: <ul style="list-style-type: none"> Think Central: Resources on the Move • Do the Math!–

FIFTH GRADE MATH CURRICULUM

	<p style="text-align: center;"><u>Interpret a Graph</u></p> <ul style="list-style-type: none"> • Dessert Party Project. • For details on above projects and additional activities see: https://docs.google.com/document/d/18zYmp71VXj7KHOCODMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks 	<ul style="list-style-type: none"> • Mid-Chapter Checkpoint (Chp.6) • Chapter 6 Test • Spiral Review pages • teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • First in math games: http://www.firstinmath.com/ • Illuminations: https://illuminations.nctm.org/ • Think Central https://www-k6.thinkcentral.com • Kahn Academy- www.khanacademy.org 	<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks
Standards	
<p>5.NF.A.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. <i>For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)</i></p> <p>5.NF.A.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. <i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p>	
Cross-Curricular Connections	
<p>21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere</p> <p>Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</p> <p>SEL: Develop, implement and model effective problem solving and critical thinking skills.</p> <p>Language Arts: W.5.2.d.: Use precise language and domain- specific vocabulary to inform about or explain the topic.</p>	

FIFTH GRADE MATH CURRICULUM

Math Unit: 7		Pacing Guide: February-March
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> ● How can I find the product of a fraction and a whole number with or without a model? ● How does the size of the product compare to the size of one factor (greater than or less than one) when multiplying fractions? ● How do you multiply fractions? ● How can you use a unit tile to find the area of a rectangle with fractions side lengths? ● How do you multiply mixed numbers? 	<ul style="list-style-type: none"> ● I can find the product of a fraction and a whole number with or without models. ● I can relate the size of the product to the factors when multiplying fractions greater than or less than one. ● I can use a model to multiply two mixed numbers and find the area of a rectangle. ● I can multiply fractions. 	<ul style="list-style-type: none"> ● SWBAT complete an assessment to multiply fractions with or without using a model with 80% accuracy (5.NF.B.4a) ● SWBAT complete an assessment to multiply fractions using unit tiles and area with 80% accuracy (5.NF.B.4b) ● SWBAT complete an assessment related to the size of the product based on whether it is multiplied by a number greater than or less than one with 80% accuracy (5.NF.B.5ab) ● SWBAT complete an assessment to solve real word problem involving multiplication of fractions and mixed numbers with 80% accuracy (5.NF.B.6)
Suggested Activities		

FIFTH GRADE MATH CURRICULUM

- Show What You Know
- Grab and Go orange activity card 6 “Fraction Fix-Up”
 - Students multiply a whole number and a fraction
- Grab and Go blue activity card 6 “Fruitful Fractions”
 - Students multiply a whole number and a fraction to find recipe measurements
- Grab and Go purple activity card 6 “Mixed Fractions”
 - Students make and multiply mixed numbers to find a product
- Grab and Go Reader – Cranking Out the Numbers
- Grab and Go game “Fraction Factors”
 - Students use number cards to multiply fractions with the greatest product
- Chapter 7 Performance Task

Reinforcement	Enrichment
<ul style="list-style-type: none"> ● Reteach worksheet pages (chapter resources book) ● Personal Math Trainer (Think Central) ● Math On the Spot videos ● Response to Intervention Activities (Think Central) ● ELL Activities ● Strategic Intervention Guide (Think Central) ● Intensive Intervention Guide (Think Central) ● Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> ● Enrich worksheet pages (chapter resources book) ● Advanced Learners Activities ● Chapter 7 STEM Activities: How Do We Know?/activity 3 (Think Central) ● Online Activities: <ul style="list-style-type: none"> ● Scale Fractions - https://www.mathplayground.com/Scale_Fractions.html ● Tug Team Fractions - https://www.mathplayground.com/ASB_TugTeamFractions.html ● Multiply Fractions- https://www.mathplayground.com/ASB_SnowSprint.html ● Classroom Activities: <ul style="list-style-type: none"> ● Think Central: <ul style="list-style-type: none"> ○ Going to the Source! • Thermal Energy ○ Diversity • Ecosystems ○ How Do We Know? • Do the Math!–Interpret a Table ● Imposter Fraction Project ● Area Comparison Activity ● For details on above projects and additional activities see: https://docs.google.com/document/d/18zYMp71VXj7KHOCoDMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing

FIFTH GRADE MATH CURRICULUM

Materials and Resources	Other Assessments
<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks 	<ul style="list-style-type: none"> ● Mid-Chapter Checkpoint (Chp.7) ● Chapter 7 Test ● Spiral Review pages ● teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> ● First in math games: http://www.firstinmath.com/ ● Illuminations: https://illuminations.nctm.org/ ● ThinkCentral https://www-k6.thinkcentral.com ● Kahn Academy- www.kahnacademy.org ● Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks
Standards	
<p>5.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.</p> <p>a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as a result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)</p> <p>b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiplying fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p> <p>5.NF.B.5 Interpret multiplication as scaling (resizing), by:</p> <p>a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</p> <p>b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.</p> <p>5.NF.B.6 Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.</p>	
Cross-Curricular Connections	
<p>21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere</p> <p>Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</p> <p>SEL: Develop, implement and model effective problem solving and critical thinking skills.</p> <p>Language Arts: W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.</p>	

FIFTH GRADE MATH CURRICULUM

Math Unit: 8		Pacing Guide: March-April
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> ● How do you divide a whole number by a fraction and divide a fraction by a whole number? ● How can the strategy <i>draw a diagram</i> help you solve division problems by writing a multiplication sentence? ● How does a fraction represent division? ● How can you divide fractions by solving a related multiplication sentence? ● How can you use diagrams, equations, and story problems to represent division? 	<ul style="list-style-type: none"> ● I can divide a whole number by a fraction and divide a fraction by a whole number. ● I can solve problems using the strategy <i>draw a diagram</i>. ● I can interpret a fraction as a division and solve whole-number division problems that result in a fraction or mixed number. ● I can divide a whole number by a fraction and divide a fraction by a whole number. ● I can represent division by drawing diagrams and writing story problems and equations. 	<ul style="list-style-type: none"> ● SWBAT complete an assessment to apply and extend previous understandings of multiplication and division to divide fractions with 80% accuracy (5.NF.B.7abc) ● SWBAT complete an assessment to solve real word problem involving division of fractions and mixed numbers with 80% accuracy (5.NF.B.3)

FIFTH GRADE MATH CURRICULUM

Suggested Activities

- Grab and Go orange activity card 6 “Fraction Fix-Up”
 - Students multiply a whole number and a fraction
- Grab and Go blue activity card 6 “Fruitful Fractions”
 - Students multiply a whole number and a fraction to find recipe measurements
- Grab and Go purple activity card 6 “Mixed Fractions”
 - Students make and multiply mixed numbers to find a product
- Grab and Go game “Fraction Factors”
 - Students use number cards to multiply fractions with the greatest product
- Grab and Go Reader – Cranking Out the Numbers
- Chapter 8 Performance Task

Reinforcement

- Reteach worksheet pages (chapter resources book)
- Personal Math Trainer (Think Central)
- Math On the Spot videos
- Response to Intervention Activities (Think Central)
- ELL Activities
- Strategic Intervention Guide (Think Central)
- Intensive Intervention Guide (Think Central)
- Screen and implement Tier 2 interventions

Enrichment

- Enrich worksheet pages (chapter resources book)
- Advanced Learners Activities
- Chapter 8 STEM Activities: Meet Scientists/activity 1 (Think Central)
- Online Activities:
 - Pizza Pandas - https://www.mathplayground.com/ASB_PizzaPandas.html
 - Visual Fractions - https://www.mathplayground.com/visual_fractions.html
 - Divide Fractions - https://www.mathplayground.com/fractions_div.html
- Classroom Activities:
 - Think Central: [Meet Scientists • Do the Math!–Use Fractions](#)
 - Mosaic Decimals Project
 - Discuss and Teach to a Peer Activity
 - Fraction Fantasy Project
 - For details on above projects and additional activities see: https://docs.google.com/document/d/18zYmp71VXj7KHOCODMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing

FIFTH GRADE MATH CURRICULUM

Materials and Resources	Other Assessments
<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks 	<ul style="list-style-type: none"> • Mid-Chapter Checkpoint (Chp.8) • Chapter 8 Test • Spiral Review pages • teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • First in math games: http://www.firstinmath.com/ • Illuminations: https://illuminations.nctm.org/ • Think Central: https://www-k6.thinkcentral.com • Kahn Academy- www.khanacademy.org • Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks
Standards	
<p>5.NF.B.7 Apply and extend previous understandings of division to divide unit fractions by whole number and whole numbers by unit fractions.</p> <p>a. Interpret division of a unit fraction by a non-zero whole numbers, and compute such quotients. <i>For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.</i></p> <p>b. Interpret division of a whole number by a unit fraction, and compute such quotients. <i>For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.</i></p> <p>c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by nit fractions, e.g., by using visual fraction models and equations to represent the problem. <i>For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$- cup servings are in 2 cups of raisins?</i></p> <p>5.NF.B.3 Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret $3/4$ as the result of dividing 3 by 4, noting that $3/4$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $3/4$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p>	
Cross-Curricular Connections	
<p>21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere</p> <p>Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</p>	

FIFTH GRADE MATH CURRICULUM

SEL: Develop, implement and model effective problem solving and critical thinking skills.

Language Arts: W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.

Math Unit: 9		Pacing Guide: April-May
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> • How can a line plot help you find an average with data given in fractions? • How can you identify and plot points on a coordinate grid? • How can you use a coordinate grid to display data collected in an experiment? • How can you use a line graph to display and analyze real-world data? • How can you identify a relationship between two numerical patterns? • How can you use the strategy <i>solve a simpler problem</i> to help you solve a problem with patterns? • How can you write and graph ordered pairs on a coordinate grid using two numerical patterns? 	<ul style="list-style-type: none"> • I can a line plot help you find an average with data given in fractions. • I can graph and name points on a coordinate grid using ordered pairs. • I can collect and graph on a coordinate grid. • I can analyze and display data in a line graph. • I can use two rules to generate a numerical pattern and identify the relationship between the corresponding terms in the patterns. • I can solve problems using the strategy <i>simpler problem</i>. • I can graph the relationship between two numerical patterns on a coordinate grid. 	<ul style="list-style-type: none"> • SWBAT complete an assessment to analyze patterns and relationships with 80% accuracy (5.OA.B.3) • SWBAT complete an assessment to make a line plot to display a data set of measurements in fractions of a unit ($1/2$, $1/4$, $1/8$) with 80% accuracy (5.MD.B2) • SWBAT complete an assessment to graph points on the coordinate plane to solve real-world and mathematical problems with 80% accuracy (5.G.A1-2)

FIFTH GRADE MATH CURRICULUM

Suggested Activities

- Grab and Go orange activity card 6 “Fraction Fix-Up”
 - Students multiply a whole number and a fraction
- Grab and Go blue activity card 19 “Figure Out the Points”
 - Students map ordered pairs on a coordinate grid
- Grab and Go orange activity card 19 “Let’s Shake!”
 - Students describe the relationship between sets of graphed data
- Grab and Go activity card 19 “What’s the Point?”
 - Students locate a specific ordered pair using the guess-and-check method
- Grab and Go Readers:
 - Graphing Practice
 - Is This a Career for You?
 - Park Visitors.
- Grab and Go game “It’s a Toss-up”
 - Students toss beanbags and express the results as ordered pairs on the coordinate plane
- Chapter 9 Performance Task

Reinforcement

- Reteach worksheet pages (chapter resources book)
- Persona Math Trainer (Think Central)
- Math On the Spot videos
- Response to Intervention Activities (Think Central)
- ELL Activities
- Strategic Intervention Guide (Think Central)
- Intensive Intervention Guide (Think Central)
- Screen and implement Tier 2 interventions

Enrichment

- Enrich worksheet pages (chapter resources book)
- Advanced Learners Activities
- Chapter 9 STEM Activities: Special Delivery: Data Displays/activity 1 (Think Central)
- Online Activities:
 - Treasure Map Graphing - <https://www.education.com/game/treasure-map-graphing/>
 - Rescue Mission - coordinates - <https://www.education.com/game/graphing-rescue-mission/>
- Classroom Activities:
 - Think Central:
 - Special Delivery: Data Displays • Do the Math! Construct a Bar Graph
 - Separating Mixtures • Do the Math!–Organize and Evaluate Data

FIFTH GRADE MATH CURRICULUM

	<ul style="list-style-type: none"> ○ <u>Warning: Rock Construction • Sediments</u> ○ <u>Climate vs. Weather • Do the Math!–Analyze Data</u> ○ <u>Change Comes Naturally • Do the Math!–Interpret a Graph</u> ○ <u>On Your Best Behavior • Do the Math!–Interpret Data in a Bar Graph</u> ○ <u>Pull (or Push) Harder • Do the Math!–Display Data in a Graph</u> ● Window Designer Project ● Geocaching Activity ● For details on above projects and additional activities see: https://docs.google.com/document/d/18zYMP71VXj7KHOCODMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks 	<ul style="list-style-type: none"> ● Mid-Chapter Checkpoint (Chp.9) ● Chapter 9 Test ● Spiral Review pages ● teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> ● First in math games: http://www.firstinmath.com/ ● Illuminations: https://illuminations.nctm.org/ ● Think Central : https://www-k6.thinkcentral.com ● Kahn Academy- www.kahacademy.org ● Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks
Standards	
<p>5.OA.B.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. <i>For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6 and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.</i></p>	

FIFTH GRADE MATH CURRICULUM

5.MD.B.2 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally*

5.G.A.1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (eg., x -axis and x -coordinate, y -axis and y -coordinate).

5.G.A.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

Cross-Curricular Connections

21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere

Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.

SEL: Develop, implement and model effective problem solving and critical thinking skills.

Language Arts: W.5.2.d.: Use precise language and domain-specific vocabulary to inform about or explain the topic.

FIFTH GRADE MATH CURRICULUM

Math Unit: 10		Pacing Guide: May
Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> • How can you compare and convert customary units of length, capacity, and weight? • How can you solve multistep problems that include measurement conversions? • How can you compare and convert metric units? • How can you use the strategy <i>make a table</i> to help solve problems about customary and metric conversions? • How can you solve elapsed time problems by converting units of time? 	<ul style="list-style-type: none"> • I can compare, contrast, convert customary units of length, capacity, and weight. • I can I convert measurement units to solve multistep problems. • I can compare, contrast, and convert metric units. • I can solve problems about customary and metric conversions using the strategy <i>make a table</i>. • I can convert units of time to solve elapsed time problems. 	<ul style="list-style-type: none"> • SWBAT complete an assessment to convert like measurement units within a given measurement system with 80% accuracy (5.MD.A.1)
Suggested Activities		
<ul style="list-style-type: none"> • Show What You Know • Grab and Go orange activity card 2 “Size It Up Metric” <ul style="list-style-type: none"> ○ Students estimate and then measure the length in metric units • Grab and Go purple activity card 2 “Conversion Challenge” <ul style="list-style-type: none"> ○ Students convert among metric units of length • Grab and Go blue activity card 2 “Measurement MATHO” <ul style="list-style-type: none"> ○ Students choose an appropriate metric unit for finding the length, mass, or capacity of an object • Grab and Go Readers – A Day in Dallas and A Math Mix-Up. • Grab and Go game “2 Steps Forward, 1 Step Back” <ul style="list-style-type: none"> ○ Students convert customary and metric units to move along the game path 		

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> Chapter 10 Performance Task 	
Reinforcement	Enrichment
<ul style="list-style-type: none"> Reteach worksheet pages (chapter resources book) Personal Math Trainer (Think Central) Math On the Spot videos Response to Intervention Activities (Think Central) ELL Activities Strategic Intervention Guide (Think Central) Intensive Intervention Guide (Think Central) Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> Enrich worksheet pages (chapter resources book) Advanced Learners Activities Chapter 10 STEM Activities: Meeting People’s Needs/activity 3 (Think Central) Online Activities: <ul style="list-style-type: none"> Rock Star Measurements - https://www.education.com/game/rock-star-ruler-measurement/ Convert Units Game - https://www.splashlearn.com/measurement-games-for-5th-graders Conversion Dominoes - https://www.turtlediary.com/game/converting-metric-units.html Classroom Activities: <ul style="list-style-type: none"> Think Central: <ul style="list-style-type: none"> <u>Scientific Experiments • Procedures, Data, Conclusion</u> <u>Loud, Soft, Hot, Cold • Do the Math!–Use Number Lines</u> <u>Fossils That Burn • Do the Math!–Use a Data Table</u> <u>Hot, Cold, and Medium • Climate Zones</u> <u>Meeting People’s Needs • Do the Math!–Solve a Problem</u> Math Connection Activity Measurement Stations Measurement Scavenger Hunt activity For details on above projects and additional activities see: https://docs.google.com/document/d/18zYmp71VXj7KHOCoDMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> Program provided manipulatives Set Go Math! Grab and Go Activity Center 	<ul style="list-style-type: none"> Mid-Chapter Checkpoint (Chp.10) Chapter 10 Test

FIFTH GRADE MATH CURRICULUM

<ul style="list-style-type: none"> • Chromebooks • Program provided workbooks 	<ul style="list-style-type: none"> • Spiral Review pages • teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> • First in math games: http://www.firstinmath.com/ • Illuminations: https://illuminations.nctm.org/ • Think Central: https://www-k6.thinkcentral.com • Kahn Academy- www.kahnacademy.org • Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> • Program provided manipulatives Set • Go Math! Grab and Go Activity Center • Chromebooks • Program provided workbooks
Standards	
5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	
Cross-Curricular Connections	
<p>21st Century Skills: CRP2. Apply appropriate academic and technical skills. CRP8. Utilize critical thinking to make sense of problems and persevere</p> <p>Technology: 8.1.5.A.1: Select and use the appropriate digital tools and resources to accomplish a variety of tasks including solving problems.</p> <p>SEL: Develop, implement and model effective problem solving and critical thinking skills.</p> <p>Language Arts: W.5.2.d.: Use precise language and domain- specific vocabulary to inform about or explain the topic.</p>	

Math Unit: 11

Pacing Guide: June

FIFTH GRADE MATH CURRICULUM

Essential Questions	Enduring Understandings	Benchmark Assessment(s)
<ul style="list-style-type: none"> ● How can you classify polygons and triangles? ● How can classify and compare quadrilaterals? ● How can you identify, describe, and classify three-dimensional figures? ● How can you use unit cubes to find the volume of a rectangular? ● How can you find the volume of a rectangular prism? ● How can you use a formula to find the volume of a rectangular prism? ● How can you use the strategy <i>make a table</i> to compare different rectangular prisms with the same volume? ● How can you find the volume of rectangular prisms that are combined? 	<ul style="list-style-type: none"> ● I can identify and classify polygons and triangles. ● I can classify and compare quadrilateral using their properties. ● I can identify, describe, and classify three-dimensional figures. ● I can count unit cubes that fill a solid figure to find volume. ● I can find the volume of a rectangular prism. ● I can use a formula to find the volume of a rectangular prism. ● I can use the strategy <i>make a table</i> to compare volumes. ● I can find the volume of combined rectangular prisms 	<ul style="list-style-type: none"> ● SWBAT complete an assessment to classify two-dimensional figures into categories based on their properties with 80% accuracy (5.G.B.34) ● SWBAT complete an assessment to recognize volume as an attribute of solid figures and understand concepts of volume measurement with 80% accuracy (5.MD.C.3ab) ● SWBAT complete an assessment to relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume (5.MD.C.4 , 5.MD.C.5abc)
Suggested Activities		
<ul style="list-style-type: none"> ● Grab and Go blue activity card 16 “Geometry MATHO” <ul style="list-style-type: none"> ○ Students match geometric terms with drawings ● Grab and Go blue activity card 20 “Protractor Practice” <ul style="list-style-type: none"> ○ Students measure and classify the angles of a triangle ● Grab and Go purple activity card 16 “Picture This” <ul style="list-style-type: none"> ○ Students identify and describe geometric figures ● Grab and Go blue activity card 14 “3D Construction” <ul style="list-style-type: none"> ○ Students build models of three-dimensional figures 		

FIFTH GRADE MATH CURRICULUM

- Grab and Go blue activity card 12 “What’s in the Box?”
 - Students find volume using unit cubes
- Grab and Go orange activity card 12 “Inner Space”
 - Students find the volume of rectangular prisms using a centimeter ruler
- Grab and Go Readers – Beautiful Geometry and City of the Future
- Grab and Go games “Model Maker”
 - Students identify the attributes of and build models of two-dimensional figures
- Grab and Go games “Triple Play”
 - Students practice finding the volume of rectangular prisms
- Chapter 11 Performance Task

Reinforcement	Enrichment
<ul style="list-style-type: none"> ● Reteach worksheet pages (chapter resources book) ● Personal Math Trainer (Think Central) ● Math On the Spot videos ● Response to Intervention Activities (Think Central) ● ELL Activities ● Strategic Intervention Guide (Think Central) ● Intensive Intervention Guide (Think Central) ● Screen and implement Tier 2 interventions 	<ul style="list-style-type: none"> ● Enrich worksheet pages (chapter resources book) ● Advanced Learners Activities ● Chapter 11 STEM Activities: More Measuring – Units of Volume/activity 1 (Think Central) ● Online Activities: <ul style="list-style-type: none"> ● Geo Boards - https://www.mathplayground.com/geoboard.html ● Pattern Blocks - https://www.mathplayground.com/patternblocks.html ● Angle Ciscus - https://www.education.com/game/angle-measurement-circus/?gclid=CjoKCOjworr4BRcTARIsABo_480xRbWZzek05OFZszyKUHUEXnDO7PN4cyuoG53uKTQf3USWqjB57saAu8eEALw_wcB ● Perimeter Snatch - https://www.mathplayground.com/perimeter_snatch_jr.html ● Party Designers - https://www.mathplayground.com/PartyDesigner/index.html ● Classroom Activities: <ul style="list-style-type: none"> ● Think Central: <ol style="list-style-type: none"> a) More Measuring • Units of Volume b) Agents of Weathering • Weathering Factors c) Light Bends • Do the Math! –Angles of Refraction

FIFTH GRADE MATH CURRICULUM

	<ul style="list-style-type: none"> ● Tetrominoes Cover-Up Activity ● Pool Designer Project ● For details on above projects and additional activities see: https://docs.google.com/document/d/18zYMP71VXj7KHOCODMRRoVI26Fb41NhU3M_tZdyp2QU/edit?usp=sharing
Materials and Resources	Other Assessments
<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks 	<ul style="list-style-type: none"> ● Mid-Chapter Checkpoint (Chp.11) ● Chapter 11 Test ● Spiral Review pages ● teacher generated assessments/activities
Suggested Websites	Suggested Materials
<ul style="list-style-type: none"> ● First in math games: http://www.firstinmath.com/ ● Illuminations: https://illuminations.nctm.org/ ● Think Central :https://www-k6.thinkcentral.com ● Kahn Academy- www.kahnacademy.org ● Splash Learn - www.splashlearn.com 	<ul style="list-style-type: none"> ● Program provided manipulatives Set ● Go Math! Grab and Go Activity Center ● Chromebooks ● Program provided workbooks
Standards	
<p>5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. <i>For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</i></p> <p>5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties.</p> <p>5.MD.C.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.</p> <ol style="list-style-type: none"> A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. <p>5.MD.C.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and non-standard units.</p> <p>5.MD.C.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.</p> <ol style="list-style-type: none"> Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. Apply the formulas as $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. 	

FIFTH GRADE MATH CURRICULUM

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