

Wallenpaupack Area School District Planned Course Curriculum Guide

Elementary

5th Grade Mathematics

Course Description:

Revision Date:

5/22/2013

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Place Value, Multiplication and Expressions	TIMEFRAME: September – Mid October

PA COMMON CORE/NATIONAL STANDARDS: CC.5.OA.1, CC.5.OA.2, CC.5.NBT.1, CC.5.NBT.2, CC.5.NBT.5, CC.5.NBT.6

UNIT OBJECTIVES (SWBATS): Students will be able to

- Recognize the 10 to 1 relationship among place-value positions
- Read and write whole numbers through hundred-millions
- Use properties of operations to solve problems
- Write and evaluate repeated factors in exponent form
- Use basic fact and a pattern to multiply mentally by multiples of 10, 100, and 1000
- Multiply by 1 digit numbers
- Multiply by 2 digit numbers
- Use multiplication to solve division problems
- Use the strategy *Solve a Simpler Problem* to solve problems
- Write numerical expressions
- Use the order of operations to evaluate numerical expressions
- Evaluate numerical expressions with parentheses, brackets, and braces

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

Go Math Textbook Chapter 1

Optional Go Math Lessons: 1.8, 1.9

Additional resources to be developed and shared collaboratively

ANCHOR VOCABULARY: Estimate, Factor, Multiply, Place Value, Product, Quotient, Base, Distributive Property, Evaluate, Exponent, Inverse Operations, Numerical Expression, Order of Operations, Period

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Mid-Chapter Checkpoint (Summative)
- Chapter Review/Test
- Go Math Chapter 1 Form B (Formative, Summative for students with 90% proficiency)
 - Eliminate Questions #15, 22, 26, 27B
- Go Math Chapter 1 Form A (Summative)
 - Eliminate Question #15, 22

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

Go Math Reteach resource

Go Math Enrich resource

Go Math RtI

Additional resources to be developed and shared collaboratively

RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Divide Whole Numbers	TIMEFRAME: Mid October – Early November

PA COMMON CORE/NATIONAL STANDARDS: CC.5.NF.3, CC.5.NBT.6

UNIT OBJECTIVES (SWBATS): Students will be able to

- Place the first digit in the quotient by estimating or using place value
- Divide 2 and 3 digit dividends by 1 digit divisors
- Model division with 2 digit divisors using base-10 blocks
- Use partial quotients to divide by 2 digit divisors
- Estimate quotients using compatible numbers
- Divide by 2 digit divisors
- Solve division problems and decide when to write the remainder as a fraction
- Adjust the quotient if the estimate is too high or too low
- Solve problems by using the strategy *Draw a Diagram*

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

Go Math Textbook Chapter 2

Recommendation: If using Go Math – Start with lesson 2.3, then 2.4, followed by 2.1 and 2.2 before mid-chapter checkpoint

Optional Go Math Lessons: 2.8 (if used, do so before lesson 2.5)

Additional resources to be developed and shared collaboratively

ANCHOR VOCABULARY: Compatible Numbers, Dividend, Divisor, Estimate, Factor, Partial Quotients, Product, Quotient, Remainder

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Mid-Chapter Checkpoint (Summative)
- Chapter Review/Test
- Go Math Chapter 2 Form B (Formative, Summative for students with 90% proficiency)
 - Eliminate Questions 20, 25
- Go Math Chapter 2 Form A (Summative)
 - Eliminate Questions 20, 25

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

Go Math Reteach resource

Go Math Enrich resource

Go Math Rtl

Additional resources to be developed and shared collaboratively

RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.):
Go Math Program Resources
Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Add and Subtract Decimals	TIMEFRAME: Early November – Thanksgiving Break

PA COMMON CORE/NATIONAL STANDARDS: CC.5.NBT.1, CC.5.NBT.3a, CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.7

UNIT OBJECTIVES (SWBATS): Students will be able to

- Model, read, and write decimals to the thousandths
- Compare and order decimals to thousandths using place value
- Round decimals to any place
- Model decimal addition and subtraction using base-10 blocks
- Make reasonable estimates of decimal sums and differences
- Add and subtract decimals using place value
- Identify, describe, and create numeric patterns with decimals
- Solve problems using the strategy *Make a Table*
- Choose a method to find a decimal sum or difference
- Compare, contrast, and convert customary units of capacity, and weight
- Compare, contrast, and convert metric units of capacity, and weight

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

Go Math Textbook Chapter 3 and Go Math Textbook Chapter 10, Lessons 10.2, 10.3, 10.6

Optional Go Math Lessons: 3.11

Additional resources to be developed and shared collaboratively

ANCHOR VOCABULARY: Benchmark, Hundredth, Place Value, Round, Tenth, Sequence, Term, Thousandth

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Mid-Chapter Checkpoint (Summative)
- Chapter Review/Test
- Go Math Chapter 3 Form B (Formative, Summative for students with 90% proficiency)
 - Eliminate Questions: None
- Go Math Chapter 3 Form A (Summative)
 - Eliminate Question: None

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content)

Go Math Reteach resource

Go Math Enrich resource

Go Math Rtl

Additional resources to be developed and shared collaboratively

RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Multiply Decimals	TIMEFRAME: Thanksgiving Break – Winter Recess

PA COMMON CORE/NATIONAL STANDARDS: CC.5.NBT.2, CC.5.NBT.7
UNIT OBJECTIVES (SWBATS): Students will be able to • Find patterns in products when multiplying by powers of 10 • Model multiplication of whole numbers and decimals • Multiply a decimal and a whole number using drawings and place value • Use expanded form and place value to multiply a decimal and a whole number • Solve problems using the strategy <i>Draw a Diagram</i> to multiply money • Model multiplication of decimals • Place a decimal point in decimal multiplication • Multiply decimals with zeros in the product
INSTRUCTIONAL STRATEGIES/ACTIVITIES: Go Math Textbook Chapter 4 Additional resources to be developed and shared collaboratively
ANCHOR VOCABULARY: Decimal, Expanded Form, Hundredths, Multiplication, Ones, Pattern, Place Value, Product, Tenths, Thousandths
ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative): • Mid-Chapter Checkpoint (Summative) • Chapter Review/Test • Go Math Chapter 4 Form B (Formative, Summative for students with 90% proficiency) ○ Eliminate Questions: None • Go Math Chapter 4 Form A (Summative) ○ Eliminate Questions: None
EVIDENCE OF MASTERY/Cut Score (Keystone Exam):
DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math Rtl Additional resources to be developed and shared collaboratively
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Divide Decimals	TIMEFRAME: Winter Recess – End of January
PA COMMON CORE/NATIONAL STANDARDS: CC.5.NBT.2, CC.5.NBT.7	
UNIT OBJECTIVES (SWBATS): Students will be able to - Find patterns in quotients when dividing by powers of ten - Model division of decimals by whole numbers - Estimate decimal quotients - Divide decimals by whole numbers - Model division by decimals - Place a decimal point in decimal division - Write a zero in the dividend to find a quotient - Solve multi-step decimal problems using the strategy <i>Work Backward</i>	
INSTRUCTIONAL STRATEGIES/ACTIVITIES: Go Math Textbook Chapter 5 Optional Lessons: 5.8 Additional resources to be developed and shared collaboratively	
ANCHOR VOCABULARY: Compatible Numbers, Decimal, Decimal Point, Dividend, Divisor, Equivalent Fractions, Estimate, Exponent, Hundredth, Quotient, Remainder, Tenth	
ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative): - Mid-Chapter Checkpoint (Summative) - Chapter Review/Test - Go Math Chapter 5 Form B (Formative, Summative for students with 90% proficiency) - Eliminate Questions: 20, 21, 25, 27B - Go Math Chapter 5 Form A (Summative) - Eliminate Questions: 20, 21, 25	
EVIDENCE OF MASTERY/Cut Score (Keystone Exam):	
DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math Rtl Additional resources to be developed and shared collaboratively	
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed	
RESOURCE SPECIFIC VOCABULARY:	



Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Geometry and Volume	TIMEFRAME: Early February – End February

PA COMMON CORE/NATIONAL STANDARDS: CC.5.MD.3, CC.5.MD.3a, CC.5.MD.3b, CC.5.MD.4, CC.5.MD.5a, CC.5.MD.5b, CC.5.MD.5c, CC.5.G.3, CC.5.G.4

UNIT OBJECTIVES (SWBATS): Students will be able to

- Identify and classify polygons
- Classify and draw triangles using their properties
- Classify and compare quadrilaterals using their properties
- Solve problems using the strategy *Act it Out*
- Identify, describe, and classify 3D figures
- Understand unit cubes and how they can be used to build a solid figure
- Count unit cubes that fill a solid figure to find volume
- Estimate and/or find the volume of a rectangular prism
- Use a formula to find the volume of a rectangular prism
- Use the strategy *Make a Table* to compare volumes
- Find the volume of combined rectangular prisms
- Compare, contrast, and convert customary units of length
- Compare, contrast, and convert metric units of length

INSTRUCTIONAL STRATEGIES/ACTIVITIES:

Go Math Textbook Chapter 11 and Go Math Textbook Chapter 10, Lessons 10.1, 10.5

Optional Lessons: 11.8, 11.11, 11.12

Additional resources to be developed and shared collaboratively

ANCHOR VOCABULARY: Acute Triangle, Decagon, Equilateral Triangle, Hexagon, Isosceles Triangle, Obtuse Triangle, Octagon, Parallelogram, Quadrilateral, Rectangle, Rhombus, Right Triangle, Scalene Triangle, Trapezoid, Base, Congruent, Heptagon, Lateral Face, Nonagon, Polygon, Polyhedron, Prism, Pyramid, Regular Polygon, Unit Cube, Volume

ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative):

- Mid-Chapter Checkpoint (Summative)
- Chapter Review/Test
- Go Math Chapter 11 Form B (Formative, Summative for students with 90% proficiency)
 - Eliminate Questions: 7, 11, 16, 19, 24, 26
- Go Math Chapter 11 Form A (Summative)
 - Eliminate Questions: 7, 11, 16, 19, 24

EVIDENCE OF MASTERY/Cut Score (Keystone Exam):

DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math Rtl Additional resources to be developed and shared collaboratively
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Add and Subtract Fractions with Unlike Denominators	TIMEFRAME: Beginning March – End March

PA COMMON CORE/NATIONAL STANDARDS: CC.5.NF.1, CC.5.NF.2	
UNIT OBJECTIVES (SWBATS): Students will be able to • Use models to add and subtract fractions with unlike denominators • Make reasonable estimates of fraction sums and differences • Find a common denominator or least common denominator to write equivalent fractions • Use equivalent fractions to add and subtract fractions • Add and subtract mixed numbers with unlike denominators • Rename to find the difference of two mixed numbers • Identify, describe, and create numeric patterns with fractions • Solve problems using the strategy <i>Work Backward</i> • Add fractions and mixed numbers with unlike denominators using the properties	
INSTRUCTIONAL STRATEGIES/ACTIVITIES: Go Math Textbook Chapter 6 Optional Lessons: 6.8 Additional resources to be developed and shared collaboratively	
ANCHOR VOCABULARY: Benchmark, Common Multiple, Denominators, Difference, Equivalent Fractions, Mixed Number, Numerator, Simplest Form, Sum, Common Denominators	
ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative): • Mid-Chapter Checkpoint (Summative) • Chapter Review/Test • Go Math Chapter 6 Form B (Formative, Summative for students with 90% proficiency) ○ Eliminate Questions: 14, 19, 26 • Go Math Chapter 6 Form A (Summative) ○ Eliminate Questions: 14, 19	
EVIDENCE OF MASTERY/Cut Score (Keystone Exam):	
DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math Rtl Additional resources to be developed and shared collaboratively	
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed	

RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Multiply Fractions	TIMEFRAME: Early April – End April
PA COMMON CORE/NATIONAL STANDARDS: CC.5.NF.4a, CC.5.NF.4b, CC.5.NF.5a, CC.5.NF.5b, CC.5.NF.6	
UNIT OBJECTIVES (SWBATS): Students will be able to • Model to find the fractional part of a group • Model the product of a fraction and a whole number • Multiply fractions and whole numbers • Multiply fractions using models • Relate the size of the product compared to the size of one factor when multiplying fractions • Multiply fractions • Use a model to multiply two mixed numbers and find the area of a rectangle • Relate the size of the product to the factors when multiplying fractions greater than one • Multiply mixed numbers • Solve problems using the strategy <i>Guess, Check, and Revise</i>	
INSTRUCTIONAL STRATEGIES/ACTIVITIES: Go Math Textbook p. 289-333 Optional Lessons: 7.7, 7.10 Additional resources to be developed and shared collaboratively	
ANCHOR VOCABULARY: Denominator, Equivalent Fractions, Mixed Number, Numerator, Product, Simplest Form	
ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative): • Mid-Chapter Checkpoint (Summative) • Chapter Review/Test • Go Math Chapter 7 Form B (Formative, Summative for students with 90% proficiency) ○ Eliminate Questions: 3, 10, 18 • Go Math Chapter 7 Form A (Summative) ○ Eliminate Questions: 3, 10, 18	
EVIDENCE OF MASTERY/Cut Score (Keystone Exam):	
DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math Rtl Additional resources to be developed and shared collaboratively	
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources	

Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Algebra: Patterns and Graphing	TIMEFRAME: Early May – Mid May
PA COMMON CORE/NATIONAL STANDARDS: CC.5.OA.3, CC.5.MD.2, CC.5.G.1, CC.5.G.2	
UNIT OBJECTIVES (SWBATS): Students will be able to • Make and use line plots with fractions to solve problems • Graph and name points on a coordinate grid using ordered pairs • Collect and graph data on a coordinate grid • Analyze and display data in a line graph • Use two rules to generate a numerical pattern and identify the relationship between the corresponding terms in the pattern • Solve problems using the strategy <i>Solve a Simpler Problem</i> • Graph the relationship between two numerical patterns on a coordinate grid	
INSTRUCTIONAL STRATEGIES/ACTIVITIES: Go Math Textbook Chapter 9 Additional resources to be developed and shared collaboratively	
ANCHOR VOCABULARY: Interval, Data, Line Plot, Line Graph, Ordered Pair, Origin, Scale, X-Axis, X-Coordinate, Y-Axis, Y-Coordinate	
ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative): • Mid-Chapter Checkpoint (Summative) • Chapter Review/Test • Go Math Chapter 9 Form B (Formative, Summative for students with 90% proficiency) ○ Eliminate Questions: None • Go Math Chapter 9 Form A (Summative) ○ Eliminate Questions: None	
EVIDENCE OF MASTERY/Cut Score (Keystone Exam):	
DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math Rtl Additional resources to be developed and shared collaboratively	
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed	
RESOURCE SPECIFIC VOCABULARY:	

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Wallenpaupack Area School District Curriculum	
COURSE: Mathematics	GRADE/S: 5
Divide Fractions	TIMEFRAME: Mid May –Mid June

PA COMMON CORE/NATIONAL STANDARDS: CC.5.NF.3, CC.5.NF.7a, CC.5.NF.7b, CC.5.NF.7c
UNIT OBJECTIVES (SWBATS): Students will be able to • Divide a whole number by a fraction and a fraction by a whole number • Solve problems using the strategy <i>Draw a Diagram</i> • Interpret a fraction as division and solve whole number division problems that result in a fraction or mixed number • Represent division by drawing diagrams and writing story problems and equations
INSTRUCTIONAL STRATEGIES/ACTIVITIES: Go Math Textbook Chapter 8 Additional resources to be developed and shared collaboratively
ANCHOR VOCABULARY: Dividend, Divisor, Equation, Fraction, Quotient
ASSESSMENTS (Diagnostic/Benchmark/Formative/Summative): • Mid-Chapter Checkpoint (Summative) • Chapter Review/Test • Go Math Chapter 8 Form B (Formative, Summative for students with 90% proficiency) ○ Eliminate Questions: None • Go Math Chapter 8 Form A (Summative) ○ Eliminate Questions: None
EVIDENCE OF MASTERY/Cut Score (Keystone Exam):
DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) Go Math Reteach resource Go Math Enrich resource Go Math RtI Additional resources to be developed and shared collaboratively
RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): Go Math Program Resources Collaborative resource binder to be developed
RESOURCE SPECIFIC VOCABULARY:

