# Wallenpaupack Area School District Planned Course Curriculum Guide 

## Elementary

## $5^{\text {th }}$ 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 $\mathbf{1 0}$ 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 $\mathbf{1 0}, \mathbf{1 0 0}$, 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 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 |
| Add and Subtract Decimals | TIMEFRAME: Early November - Thanksgiving <br> 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 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 |
| 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 <br> - Find patterns in products when multiplying by powers of $\mathbf{1 0}$ <br> - Model multiplication of whole numbers and decimals <br> - Multiply a decimal and a whole number using drawings and place value <br> - Use expanded form and place value to multiply a decimal and a whole number <br> - Solve problems using the strategy Draw a Diagram to multiply money <br> - Model multiplication of decimals <br> - Place a decimal point in decimal multiplication <br> - Multiply decimals with zeros in the product |
| INSTRUCTIONAL STRATEGIES/ACTIVITIES: <br> Go Math Textbook Chapter 4 <br> 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): <br> - Mid-Chapter Checkpoint (Summative) <br> - Chapter Review/Test <br> - Go Math Chapter 4 Form B (Formative, Summative for students with $\mathbf{9 0 \%}$ proficiency) <br> - Eliminate Questions: None <br> - Go Math Chapter 4 Form A (Summative) <br> - Eliminate Questions: None |
| EVIDENCE OF MASTERY/Cut Score (Keystone Exam): |
| DIFFERENTIATED INSTRUCTION (Remediation/Extension) (Process, Product or Content) <br> Go Math Reteach resource <br> Go Math Enrich resource <br> Go Math RtI <br> Additional resources to be developed and shared collaboratively |
| RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): <br> Go Math Program Resources <br> Collaborative resource binder to be developed |
| RESOURCE SPECIFIC VOCABULARY: |

$\square$

| 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 Work Backward

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 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 |
| 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 RtI |
| Additional resources to be developed and shared collaboratively |
| RESOURCES (Websites, Blogs, Videos, Whiteboard Resources, etc.): <br> Go Math Program Resources <br> Collaborative resource binder to be developed <br> RESOURCE SPECIFIC VOCABULARY: <br>  |


| Wallenpaupack Area School District Curriculum |  |
| :--- | :--- |
| COURSE: Mathematics | GRADE/S: 5 |
| Add and Subtract Fractions with Unlike <br> 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 Work Backward
- 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 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 |
| 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 Guess, Check, and Revise

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 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 |
| 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 Solve a Simpler Problem
- 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, XCoordinate, 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 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 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 Draw a Diagram
- 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:

