## GTPS Curriculum – 4th Grade Math

### Suggested Blocks of Instruction:
12 days /September

### Objectives/CPI’s/Standards

**Use the four operations with whole numbers to solve problems.**

4.OA.1. Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

4.OA.2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

4.OA.3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

**Gain familiarity with factors and multiples.**

4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

**Generate and analyze patterns.**

4.OA.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

### Topic: 1 - Multiplication and Division: Meanings and Facts

#### Essential Questions

- How can patterns and properties be used to find some multiplication facts?
- How can unknown multiplication facts be found by breaking them apart into known facts?
- How can unknown division facts be found by thinking about a related multiplication fact?

#### Enduring Understandings

- Some real-world problems involving joining or separating equal groups can be solved using multiplication. Repeated addition and arrays are two ways to think about multiplication.
- Some real-world problems involving joining or separating equal groups can be solved using division. Sharing and repeated subtraction are two ways to think about division.
- Multiplication and division have an inverse relationship. The inverse relationship between multiplication and division can be used to find division facts; every division fact has a related multiplication fact.
- There are patterns in the products for multiplication facts with factors of 2, 5, and 9.
- Two numbers can be multiplied in any order.
- Any number (except 0) divided by itself equals 1.
- Basic multiplication facts with 3, 4, 6, 7, and 8 as a factor can be found by breaking apart the unknown fact into known facts.
- Information in a problem can often be shown using a picture or diagram and used to understand and solve problems.

### Materials/Assessment

**Materials:** enVision Math

- 1.1 Meanings of multiplication
- 1.2 Patterns for facts
- 1.3 Multiplication properties
- 1.4 3, 4, 6, 7, and 8 as factors
- 1.5 Look for a pattern
- 1.6 Meanings of division
- 1.7 Relating multiplication & division
- 1.8 Special quotients
- 1.9 Using Multiplication facts to find division facts

**Web Site Resources:**

www.pearsonsuccessnet.com

**Assessments:**

**Formative**
- Topic Readiness Test
- Teacher observation
- Daily Quick Check Masters

**Summative**
- End of module performance assessment
- Portfolio assessment
<table>
<thead>
<tr>
<th>Suggested Blocks of Instruction:</th>
<th>Topic: 2 - Generate and Analyze Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 days / September / October</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives/CPT’s/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
</table>
| 4.OA.5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. | • How can patterns be used to describe how two quantities are related?  
• How can a relationship between two quantities be shown using a table?  
**Enduring Understandings**  
• Some patterns consist of shapes or numbers arranged in a unit that repeats.  
• Some numerical sequences have rules that tell how to generate more numbers in the sequence.  
• Some real-world quantities have a mathematical relationship; the value of one quantity can be found if you know the value of the other quantity.  
• Some real-world quantities have a mathematical relationship; the value of one quantity can be found if the value of the other quantity is known.  
• Some sequences of geometric objects change in predictable ways that can be described using mathematical rules. | 2.1 Repeating patterns  
2.2 number sequences  
2.3 Extending tables  
2.4 Writing rules for situations  
2.5 Geometric patterns  
2.6 Act it out and use reasoning |

**Web Site Resources:**
[www.pearsonsuccessnet.com](http://www.pearsonsuccessnet.com)

**Assessments:**
Formative  
• Topic Readiness Test  
• Teacher observation  
• Daily Quick Check Masters

Summative  
• End of module performance assessment  
• Portfolio assessment
### Suggested Blocks of Instruction:
8 days /October

### Topic: 3 -Place Value

#### Objectives/CPI's/Standards

**Generalize place value understanding for multi-digit whole numbers.**

4.NBT.1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.

4.NBT.2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place.

#### Essential Questions/Enduring Understandings

**Essential Questions**

- How are greater numbers read and written?
- How can whole numbers be compared and ordered?

**Enduring Understandings**

- Our number system is based on groups of ten. Whenever we get 10 in one place value, we move to the next greater place value.
- In a multi-digit whole number, a digit in one place represents ten times what it would represent in the place immediately to its right.
- Place value can be used to compare and order numbers.
- Rounding whole numbers is a process for finding the multiple of 10, 100, and so on closest to a given number.

#### Materials/Assessment

**Materials:** enVision Math
1. Representing numbers
2. Place value relationships
3. Comparing numbers
4. Ordering numbers
5. Rounding whole numbers
6. Make an organized list

**Web Site Resources:**
[www.pearsonsuccessnet.com](http://www.pearsonsuccessnet.com)

**Assessments:**

- **Formative**
  - Topic Readiness Test
  - Teacher observation
  - Daily Quick Check Masters

- **Summative**
  - End of module performance assessment
  - Portfolio assessment
### Suggested Blocks of Instruction:
8 days /October / November

<table>
<thead>
<tr>
<th>Topic: 4 - Addition and Subtraction of Whole Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives/CPT's/Standards</strong></td>
</tr>
</tbody>
</table>
| Generalize place value understanding for multi-digit whole numbers. | Essential Questions  
• How can sums and differences of whole numbers be estimated?  
• What are standard procedures for adding and subtracting whole numbers? | Materials: enVision Math  
4.1 Using mental math to add & subtract  
4.2 Estimating sums & differences of whole #'s  
4.3 Adding whole numbers  
4.4 Subtracting whole numbers  
4.5 Subtracting across zeros  
4.6 Draw a picture and write an equation |
| Use place value understanding and properties of operations to perform multi-digit arithmetic. | Enduring Understandings  
• Representing numbers and numerical expressions in equivalent forms can make some calculations easy to do mentally.  
• There is more than one way to do a mental calculation.  
• The standard addition and subtraction algorithms for multi-digit numbers break the calculation into simpler calculations using place value starting with the ones, then the tens, and so on.  
• There is more than one way to estimate a sum or difference. Each estimation technique has a way to replace numbers with other numbers that are close and easy to compute with mentally. | |
| 4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place. | | |

**Web Site Resources:**
www.pearsonsuccessnet.com

**Assessments:**
Formative  
• Topic Readiness Test  
• Teacher observation  
• Daily Quick Check Masters

Summative  
• End of module performance assessment  
• Portfolio assessment
**Suggested Blocks of Instruction:**
8 days / November

**Topic:** 5 - Number Sense: Multiplying by 1-Digit Numbers

<table>
<thead>
<tr>
<th>Objectives/CPI’s/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use the four operations with whole numbers to solve problems.</strong></td>
<td><strong>Essential Questions</strong>&lt;br&gt;• How can some products be found mentally?&lt;br&gt;• How can products be estimated?&lt;br&gt;&lt;br&gt;<strong>Enduring Understandings</strong>&lt;br&gt;• Making an array with place-value blocks provides a way to visualize and find products.&lt;br&gt;• Making an array with place-value blocks provides a way to visualize and find products. A 2-digit by 1-digit multiplication calculation can be broken into simpler problems: a basic fact and a 1-digit number times a multiple of 10. Answers to simpler problems can be added to give the product.&lt;br&gt;• There is more than one way to do a mental calculation. Techniques for doing multiplication calculations mentally involve changing the numbers or the expression so the calculation is easy to do mentally.&lt;br&gt;• Basic facts and place value patterns can be used to find products when one factor is 10 or 100.&lt;br&gt;• Rounding is one way to estimate products.</td>
<td><strong>Materials:</strong> enVision Math&lt;br&gt;5.1 Arrays and multiplying by 10 and 100&lt;br&gt;5.2 Multiplying by multiples of 10 and 100&lt;br&gt;5.3 Breaking apart to multiply&lt;br&gt;5.4 Using mental math to multiply&lt;br&gt;5.5 Using rounding to estimate&lt;br&gt;5.6 Reasonableness</td>
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<tr>
<td><strong>Use place value understanding and properties of operations to perform multi-digit arithmetic.</strong></td>
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<td><strong>Web Site Resources:</strong>&lt;br&gt;www.pearsonsuccessnet.com</td>
</tr>
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<td><strong>Assessments:</strong>&lt;br&gt;Formative&lt;br&gt;• Topic Readiness Test&lt;br&gt;• Teacher observation&lt;br&gt;• Daily Quick Check Masters&lt;br&gt;&lt;br&gt;Summative&lt;br&gt;• End of module performance assessment&lt;br&gt;• Portfolio assessment</td>
</tr>
<tr>
<td>Suggested Blocks of Instruction:</td>
<td>Topic: 6 - Developing Fluency: Multiplying by 1-Digit Numbers</td>
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<td>8 days / November / December</td>
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<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives/CPI's/Standards</th>
<th>Essential Questions</th>
<th>Materials/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use place value understanding and properties of operations to perform multi-digit arithmetic.</td>
<td>Essential Questions</td>
<td>Materials: enVision Math</td>
</tr>
</tbody>
</table>
| 4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | - How can arrays be used to find products?  
- What is a standard procedure for multiplying multi-digit numbers? | 6.1 Arrays and using an expanded algorithm  
6.2 Connecting the expanded and standard algorithms  
6.3 Multiplying 2 digit by 1 digit numbers  
6.4 Multiplying 3 and 4 digit by 1 digit #'s  
6.5 Multiplying by 1 digit numbers  
6.6 Missing or extra information |

<table>
<thead>
<tr>
<th>Enduring Understandings</th>
<th>Web Site Resources:</th>
<th>Assessments:</th>
</tr>
</thead>
</table>
| There is an expanded algorithm for multiplying where numbers are broken apart using place value and the parts are used to find partial products. The partial products are than added together to find the product.  
The standard multiplication algorithm is just a shortened way of recording the information in the expanded multiplication algorithm.  
The standard multiplication algorithm is a shortcut for the expanded algorithm. Regrouping is used rather than showing all partial products.  
The standard algorithm for multiplying three-digit by one-digit numbers is just an extension to the hundreds place of the algorithm for multiplying two-digit by one-digit numbers.  
The standard algorithm for multiplication involves breaking apart numbers using place value, finding partial products, and then adding partial products to get the final product. The process is the same regardless of the size of the factors. | www.pearsonsuccessnet.com | Formative  
- Topic Readiness Test  
- Teacher observation  
- Daily Quick Check Masters  
Summative  
- End of module performance assessment  
- Portfolio assessment |
**GTPS Curriculum – 4th Grade Math**

<table>
<thead>
<tr>
<th>Suggested Blocks of Instruction: 7 days / December</th>
<th><strong>Topic:</strong> 7 - Number Sense: Multiplying by 2-Digit Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objectives/CPI's/Standards</strong></td>
<td><strong>Essential Questions/Enduring Understandings</strong></td>
</tr>
</tbody>
</table>
| Generalize place value understanding for multi-digit whole numbers. | Essential Questions  
- How can greater products be found mentally?  
- How can greater products be estimated?  
Enduring Understandings  
- Making an array with place-value blocks provides a way to visualize and find products.  
- Basic facts and place-value patterns can be used to mentally multiply a two-digit number by a multiple of 10 or 100.  
- Products can be estimated by replacing numbers with the closest multiple 10 or 100.  
- Products can be estimated by replacing numbers with other numbers that are close and easy to multiply mentally. | Materials: enVision Math  
7.1 Arrays and multiplying 2 digit numbers by multiples of 10  
7.2 Using mental math to multiply 2 digit numbers  
7.3 Using rounding to estimate  
7.4 Using compatible numbers to estimate  
7.5 Multiple step problems |
| Use place value understanding and properties of operations to perform multi-digit arithmetic. | | Web Site Resources:  
www.pearsonsuccessnet.com |
| 4.NBT.3. Use place value understanding to round multi-digit whole numbers to any place. | | Assessments:  
Formative  
- Topic Readiness Test  
- Teacher observation  
- Daily Quick Check Masters  
Summative  
- End of module performance assessment  
- Portfolio assessment |
| 4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | | |
### Suggested Blocks of Instruction:
7 days / January

<table>
<thead>
<tr>
<th>Objectives/CPI’s/Standards</th>
<th>Topic: 8 - Multiplying by 2-Digit Numbers</th>
<th>Materials/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use place value understanding and properties of operations to perform multi-digit arithmetic.</td>
<td>Essential Questions/Enduring Understandings</td>
<td>Materials: enVision Math</td>
</tr>
<tr>
<td>4.NBT.5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</td>
<td>Essential Questions</td>
<td>8.1 Arrays and multiplying 2 digit numbers</td>
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<tr>
<td>8.2 Arrays and an expanded algorithm</td>
<td>8.3 Multiplying 2 digit numbers by multiples of 10</td>
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</tr>
<tr>
<td>8.4 Multiplying 2 digit by 2 digit numbers</td>
<td>8.5 Two question problems</td>
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<td>8.5 Two question problems</td>
<td>Web Site Resources:</td>
<td><a href="http://www.pearsonsuccessnet.com">www.pearsonsuccessnet.com</a></td>
</tr>
<tr>
<td>Assessments:</td>
<td></td>
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<tr>
<td>Formative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic Readiness Test</td>
<td></td>
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<tr>
<td>Teacher observation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Quick Check Masters</td>
<td></td>
<td></td>
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<tr>
<td>Summative</td>
<td></td>
<td></td>
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<tr>
<td>End of module performance assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portfolio assessment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Suggested Blocks of Instruction:
8 days /January

### Topic: 9 - Number Sense: Dividing by 1-Digit Divisors

<table>
<thead>
<tr>
<th>Objectives/CPI’s/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
</table>
| Generalize place value understanding for multi-digit whole numbers. | Essential Questions  
- What are different meanings of division?  
- How can mental math and estimation be used to divide?  
Enduring Understandings  
- Basic facts and place-value patterns can be used to divide multiples of 10 and 100 by one-digit numbers.  
- Substituting compatible numbers is an efficient technique for estimating quotients.  
- Mentally multiplying by different powers of ten will help you arrive at an estimate for a quotient of a multi-digit division problem.  
- The remainder when dividing must be less than the divisor. The nature of the question asked determines how to interpret and use the remainder.  
- Some real-world problems involving joining equal groups, separating equal groups, or comparison can be solved using multiplication; others can be solved using division. | Materials: enVision Math  
9.1 Using mental math to divide  
9.2 Estimating quotients  
9.3 Estimating quotients for greater dividends  
9.4 Dividing with remainders  
9.5 Multiplication & division stories  
9.6 draw a picture and write an equation  
Web Site Resources: www.pearsonsuccessnet.com  
Assessments:  
Formative  
- Topic Readiness Test  
- Teacher observation  
- Daily Quick Check Masters  
Summative  
- End of module performance assessment  
- Portfolio assessment |
## Suggested Blocks of Instruction:
10 days / January / February

### Topic:
10 - Developing Fluency: Dividing by 1-Digit Divisors

<table>
<thead>
<tr>
<th>Objectives/CPI's/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use the four operations with whole numbers to solve problems.</strong></td>
<td><strong>Essential Questions</strong>&lt;br&gt;• How can repeated subtraction be used to model division?&lt;br&gt;• What is the standard procedure for dividing multi-digit numbers?&lt;br&gt;<strong>Enduring Understandings</strong>&lt;br&gt;• Repeated subtraction situations can be modeled and solved using division.&lt;br&gt;• Repeated subtraction situations can be solved using a division algorithm different from the standard algorithm.&lt;br&gt;• The sharing interpretation of division can be used to model the standard division algorithm.&lt;br&gt;• The standard division algorithm breaks the calculation into simpler calculations using basic facts, place value the relationship between multiplication and division, and estimation.&lt;br&gt;• The relationship between multiplication, division, and estimation can help determine the place value of the largest digit in a quotient.</td>
<td><strong>Materials:</strong> enVision Math&lt;br&gt;10.1 Using objects to divide: division as repeated subtraction&lt;br&gt;10.2 Division as repeated subtraction&lt;br&gt;10.3 Division as sharing&lt;br&gt;10.4 Dividing 2 digit by 1 digit #'s&lt;br&gt;10.5 Dividing 3 digit by 1 digit numbers&lt;br&gt;10.6 Deciding where to start dividing&lt;br&gt;10.7 Dividing 4 digit numbers by 1 digit #'s&lt;br&gt;10.8 Multistep problems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Web Site Resources:</th>
<th><strong>Assessments:</strong>&lt;br&gt;Formative&lt;br&gt;• Topic Readiness Test&lt;br&gt;• Teacher observation&lt;br&gt;• Daily Quick Check Masters</th>
<th>Summative&lt;br&gt;• End of module performance assessment&lt;br&gt;• Portfolio assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generalize place value understanding for multi-digit whole numbers.</strong></td>
<td><strong>Materials:</strong> enVision Math&lt;br&gt;10.1 Using objects to divide: division as repeated subtraction&lt;br&gt;10.2 Division as repeated subtraction&lt;br&gt;10.3 Division as sharing&lt;br&gt;10.4 Dividing 2 digit by 1 digit #'s&lt;br&gt;10.5 Dividing 3 digit by 1 digit numbers&lt;br&gt;10.6 Deciding where to start dividing&lt;br&gt;10.7 Dividing 4 digit numbers by 1 digit #'s&lt;br&gt;10.8 Multistep problems</td>
<td><strong>Web Site Resources:</strong>&lt;br&gt;www.pearsonsuccessnet.com</td>
</tr>
</tbody>
</table>
### GTPS Curriculum – 4th Grade Math

**Suggested Blocks of Instruction:** 10 days / February

**Topic:** 11 - Fraction Equivalence and Ordering

<table>
<thead>
<tr>
<th>Objectives/CPI’s/Standards</th>
<th>Essential Questions</th>
<th>Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
</table>
| 4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite. | - How can the same fractional amount be named using symbols in different ways?  
- How can fractions be compared and ordered? | **Materials:** 11.1 Factors  
11.2 Prime & composite numbers  
11.3 Multiples  
11.4 Equivalent fractions  
11.5 # lines and equivalent fractions  
11.6 Comparing fractions  
11.7 Ordering fractions  
11.8 Writing to explain | **Web Site Resources:**  
www.pearsonsuccessnet.com |
| Extend understanding of fraction equivalence and ordering. | Essential Questions | Enduring Understandings | **Assessments:**  
**Formative**  
- Topic Readiness Test  
- Teacher observation  
- Daily Quick Check Masters |
| 4.NF.1. Explain why a fraction a/b is equivalent to a fraction (n × a)/(n × b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.  
4.NF.2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators, or by comparing to a benchmark fraction. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers. | - Every counting number is divisible by 1 and itself, and some counting numbers are also divisible by other numbers.  
- Some counting numbers have exactly two factors; others have more than two.  
- The product of any nonzero number and any other nonzero number is divisible by each number and is called a multiple of each number.  
- The same fractional amount can be represented by an infinite set of different but equivalent fractions. Equivalent fractions are found by multiplying or dividing the numerator and denominator by the same nonzero number.  
- If two fractions have the same denominator, the fraction with the greater numerator is the greater fraction. If two fractions have the same numerator, the fraction with lesser denominator is the greater fraction.  
- Ordering 3 or more numbers is similar to comparing 2 numbers because each number must be compared to the other numbers. | **Assessments:**  
**Summative**  
- End of module performance assessment  
- Portfolio assessment |
**Topic:** 12 - Adding & Subtracting Fractions and Mixed Numbers with Like Denominators

<table>
<thead>
<tr>
<th>Suggested Blocks of Instruction:</th>
<th>13 days / February / March</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Objectives/CPI’s/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Extend understanding of fraction equivalence and ordering.</strong></td>
<td><strong>Essential Questions</strong></td>
<td><strong>Materials:</strong> enVision Math</td>
</tr>
<tr>
<td>4.NF.3. Understand a fraction a/b with a &gt; 1 as a sum of fractions 1/b.</td>
<td>• What does it mean to add and subtract fractions and numbers with like denominators?</td>
<td>12.1 Modeling addition of fractions</td>
</tr>
<tr>
<td>3a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</td>
<td>• What is a standard procedure for adding and subtracting fractions and mixed numbers with like denominators?</td>
<td>12.2 Adding fractions with like denominators</td>
</tr>
<tr>
<td>3b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: (3/8 = 1/8 + 1/8 + 1/8); (3/8 = 1/8 + 2/8); (2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8).</td>
<td>• How can fractions and mixed numbers be added and subtracted on a number line?</td>
<td>12.3 Modeling subtraction of fractions</td>
</tr>
<tr>
<td>3c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</td>
<td><strong>Enduring Understandings</strong></td>
<td>12.4 Subtracting fractions with like denominators</td>
</tr>
<tr>
<td>3d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.</td>
<td>• A model can be used to add or subtract two or more fractions.</td>
<td>12.5 Adding &amp; subtracting on the #line</td>
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<td>• When adding or subtracting fractions with like denominators, you are adding or subtracting portions of the same size. So, you can add or subtract the numerators without changing the denominators.</td>
<td>12.6 Improper fractions &amp; mixed #’s</td>
</tr>
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<td>• One way to add or subtract mixed numbers is to add the fractional parts and then add or subtract the whole number parts. Sometimes whole numbers or fractions need to be renamed.</td>
<td>12.7 Modeling addition &amp; subtraction of mixed #’s</td>
</tr>
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<td></td>
<td>• Models can be used to show different ways of adding and subtracting mixed numbers.</td>
<td>12.8 Adding Mixed #’s</td>
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<tr>
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<td>• Positive fractions can be added or subtracted by locating a fraction on the number line and then moving to the right to add or to the left to subtract.</td>
<td>12.9 Subtracting mixed #’s</td>
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<td>• Fractional amounts greater than 1 can be represented using a whole number and a fraction. Whole number amounts can be represented as fractions. When the numerator and denominator are equal, the fraction equals 1.</td>
<td>12.10 Decomposing &amp; composing fractions</td>
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<td><strong>Web Site Resources:</strong></td>
<td>12.11 Draw a picture &amp; write an equation</td>
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<td><a href="http://www.pearsonsuccessnet.com">www.pearsonsuccessnet.com</a></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessments:</th>
<th>Formative</th>
<th>Summative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Topic Readiness Test</td>
<td>• End of module performance assessment</td>
</tr>
<tr>
<td></td>
<td>• Teacher observation</td>
<td>• Portfolio assessment</td>
</tr>
<tr>
<td></td>
<td>• Daily Quick Check Masters</td>
<td></td>
</tr>
</tbody>
</table>

| Assessments:                     | Summative          |
|                                  | • End of module performance assessment |
|                                  | • Portfolio assessment |
**Suggested Blocks of Instruction:**
12 days / March / April

**Topic: 13 - Extending Fractions Concepts**

<table>
<thead>
<tr>
<th>Objectives/CPI’s/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
</table>
| 4.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. 4a. Understand a fraction a/b as a multiple of 1/b. Use a visual fraction model to represent 5/4 as the product 5 × 1/4 4b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. Use a visual fraction model to express 3 × (2/5) as 6 × (1/5) – 6/5 4c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using models and equations to represent the problem. If each person at a party will eat 3/8 lb of roast beef, and there will be 5 people at the party, how many pounds of beef will be needed? Between what 2 whole #’s does your answer lie? | Essential Questions  
• How is decimal numeration related to whole number numeration?  
• How can decimals be compared and ordered?  
• How are fractions and decimals related?  

Enduring Understandings  
• Physical representations and symbols can be used to develop the understanding that a/b = a × 1/b.  
• Models can be used to find the product of a whole number and a fraction.  
• To multiply a fraction by a whole number, one must multiply the whole number by the numerator of the fraction and then divide the product by the denominator of the fraction.  
• Place value can be used to compare and order numbers.  
• A decimal is another name for a fraction.  
• Each fraction, mixed number, and decimal can be associated with a unique point on the number line.  
• Every fraction can be represented by an infinite number of equivalent fractions, but each fraction is represented by the same decimal or an equivalent form.  
• Decimal numeration is just an extension of whole number numeration.  
• Relationships among dollars, dimes, and pennies are a good model for decimal numeration. | Materials: enVision Math  
13.1 Fractions as multiples of unit fractions  
13.2 Multiplying a fraction by a whole #  
13.3 Multiplying a fraction by a whole # using symbols  
13.4 Fractions & decimals  
13.5 Fractions & decimals on the # line  
13.6 Equivalent fractions & decimals  
13.7 Decimal place value  
13.8 Comparing & ordering decimals  
13.9 Using money to understand decimals |

**Web Site Resources:**
www.pearsonsuccessnet.com

**Assessments:**

Formative  
• Topic Readiness Test  
• Teacher observation  
• Daily Quick Check Masters

Summative  
• End of module performance assessment  
• Portfolio assessment
### Suggested Blocks of Instruction:
13 days / April

<table>
<thead>
<tr>
<th>Objectives/CPI's/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
</table>
| Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. | Essential Questions  
- What are the customary and metric units for measuring length, capacity, and weight/mass, and how are they related?  
Enduring Understandings  
- Length can be estimated and measured in different systems (customary, metric) and using different units in each system that are related to each other.  
- Capacity is a measure of the amount of liquid a container can hold. Capacity can be measured in different systems (customary, metric) and using different units in each system that are related to each other.  
- The weight of an object is a measure of how heavy an object is.  
- Mass is a measure of the quantity of matter in an object. Weight and mass are different measures.  
- Time can be expressed using different units that are related to each other.  
- Length can be estimated in different measurement systems.  
- Relationships between customary measurement units can be expressed as a function (e.g., 12 inches to 1 ft or 12 in. = 1 ft). Relationships exist that enable you to convert between metric units of the same attribute by multiplying or dividing.  
- Relationships between metric units can be expressed as a function (e.g., 10 mm to 1 cm or 10 mm = 1 cm). Relationships exist that enable you to convert between metric units of the same attribute by multiplying or dividing. | Materials: enVision Math  
14.1 Using customary units of length  
14.2 Customary units of capacity  
14.3 Units of weight  
14.4 Changing customary units  
14.5 Writing to explain  
14.6 Using metric units of length  
14.7 Metric units of capacity  
14.8 Units of mass  
14.9 Changing metric units  
14.10 Units of time  
14.11 Work backward |

**Web Site Resources:**
www.pearsonsuccessnet.com

**Assessments:**
- Formative  
  - Topic Readiness Test  
  - Teacher observation  
  - Daily Quick Check Master  
- Summative  
  - End of module performance assessment  
  - Portfolio assessment
<table>
<thead>
<tr>
<th>Suggested Blocks of Instruction:</th>
<th>Topic: 15 - Solving Measurement Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 days / April / May</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives/CPI's/Standards</th>
<th>Essential Questions/Enduring Understandings</th>
<th>Materials/Assessment</th>
</tr>
</thead>
</table>
| Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit. | Essential Questions  
- What do area and perimeter mean and how can each be found?  
- How can line plots and other tools help to solve measurement problems?  
Enduring Understandings  
- Some problems can be solved by applying the formula for the perimeter of a rectangle or the formula for the area of a rectangle.  
- Some measurement problems can be represented and solved using models.  
- Making change is often easiest by counting from the smaller amount to the larger amount.  
- Some data can be represented using a line plot and the line plot can be sued to answer certain questions about the data. | Materials: enVision Math  
15.1 Solving perimeter & area problems  
15.2 Solving measurement problems  
15.3 Solving problems involving money  
15.4 Solving problems involving line plots  
15.5 Solve a simpler problem and make a table |

<table>
<thead>
<tr>
<th>Represent and interpret data.</th>
<th>Web Site Resources:</th>
<th>Assessments:</th>
</tr>
</thead>
</table>
| 4.MD.4. Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection. | Web Site Resources: www.pearsonsuccessnet.com | Formative  
- Topic Readiness Test  
- Teacher observation  
- Daily Quick Check Master  
Summative  
- End of module performance assessment  
- Portfolio assessment |
**Objectives/CPI's/Standards**

**Draw and identify lines and angles, and classify shapes by properties of their lines and angles.**

4.G.1 Draw points, lines, line segments, rays, angles (right, acute obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

4.G.2 Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

**Essential Questions/Enduring Understandings**

**Essential Questions**

- How can line, angles, and shapes be described, analyzed, and classified?
- How are angles measured, added, and subtracted?

**Enduring Understandings**

- Point, line, and plane are the core attributes of space objects, and real-world situations can be used to think about these attributes.
- Line segments and rays are sets of points that describe parts of lines, shapes and solids. Angles are formed by two intersecting lines or by rays with a common endpoint and are classified by size.
- Two-dimensional or plane shapes have many properties that make them different from one another. Polygons can be described and classified by their sides and angles.
- The measure of an angle depends upon the fraction of the circle cut off by its rays.
- The unit for measuring the size of the opening of an angle is 1 degree.
- Angle measures can be added or subtracted.

**Materials/Assessment**

**Materials:** enVision Math

- 16.1 Points, lines and planes
- 16.2 Line segments, rays and angles
- 16.3 Understanding angles and unit angles
- 16.4 Measuring with unit angles
- 16.5 Measuring angles
- 16.6 Adding & subtracting angle measures
- 16.7 Polygons
- 16.8 Triangles
- 16.9 Quadrilaterals
- 16.10 Line symmetry
- 16.11 Make & test generalizations

**Web Site Resources:**

www.pearsonsuccessnet.com

**Assessments:**

**Formative**

- Topic Readiness Test
- Teacher observation
- Daily Quick Check Master

**Summative**

- End of module performance assessment
- Portfolio assessment