

STANDARDS FOR MATHEMATICAL CONTENT

This correlation includes Ten-Minute Math activities but does not include ongoing review in Daily Practice and Homework.

Grade 4 Curriculum Units

- U1** Factors, Multiples, and Arrays
- U2** Describing the Shape of the Data
- U3** Multiple Towers and Division Stories
- U4** Size, Shape, and Symmetry
- U5** Landmarks and Large Numbers
- U6** Fraction Cards and Decimal Squares
- U7** Moving Between Solids and Silhouettes
- U8** How Many Packages? How Many Groups?
- U9** Penny Jars and Plant Growth

Domain 4.OA Operations and Algebraic Thinking

Use the four operations with whole numbers to solve problems.

<p>4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.</p>	<p>U1 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6A, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4</p> <p>U3 Sessions 1.1, 1.2, 1.4A, 1.5A, 3.3A</p> <p>U8 Sessions 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5</p>
<p>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.</p>	<p>U1 Sessions 1.3, 1.5, 1.6A, 3.4</p> <p>U3 Sessions 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 3.3, 3.4, 4.1, 4.3, 4.5</p> <p>U8 Sessions 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6</p>
<p>4.OA.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.</p>	<p>U1 Sessions 1.4, 3.2</p> <p>U3 Session 1.1</p> <p>U8 Sessions 1.5, 2.1, 2.2, 3.3, 3.5</p>

Gain familiarity with factors and multiples.

<p>4.OA.4 Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.</p>	<p>U1 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.3, 3.2, 3.3, 3.4</p>
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Generate and analyze patterns.

<p>4.OA.5 Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</p>	<p>U8 Sessions 3.2, 3.3, 3.4</p> <p>U9 Sessions 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3</p>
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Domain 4.NBT Number and Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers

<p>4.NBT.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.</p>	<p>U5 Sessions 1.1, 3.1, 3.6A</p>
<p>4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons</p>	<p>U5 Sessions 1.1, 1.2, 1.3, 1.4, 1.5A, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6A, 4.1, 4.2, 4.3, 4.5, 4.6</p>
<p>4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.</p>	<p>U5 Sessions 1.5A, 3.6A</p>

Use place value understanding and properties of operations to perform multi-digit arithmetic.

<p>4.NBT.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>	<p>U5 Sessions 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4A, 4.4, 4.4, 4.6, 4.7</p>
<p>4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p>U3 Sessions 1.1, 1.3, 1.4, 1.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5</p> <p>U8 Sessions 2.1, 2.2, 2.3A, 2.3, 2.4, 2.5, 3.1, 3.4, 3.5, 3.6</p>
<p>4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>	<p>U3 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 4.1</p> <p>U8 Sessions 3.5A, 3.6</p>

STANDARDS FOR MATHEMATICAL CONTENT

This correlation includes Classroom Routines but does not include ongoing review in Daily Practice and Homework.

Grade 4 Curriculum Units

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| U1 Factors, Multiples, and Arrays | U6 Fraction Cards and Decimal Squares |
| U2 Describing the Shape of the Data | U7 Moving Between Solids and Silhouettes |
| U3 Multiple Towers and Division Stories | U8 How Many Packages? How Many Groups? |
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| U5 Landmarks and Large Numbers | |

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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.	U1 Sessions 1.3, 1.5, 1.6A, 3.4 U3 Sessions 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 3.3, 3.4, 4.1, 4.3, 4.5 U8 Sessions 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6
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.	U1 Sessions 1.4, 3.2 U3 Session 1.1 U8 Sessions 1.5, 2.1, 2.2, 3.3, 3.5

Gain familiarity with factors and multiples.

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4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.	U5 Sessions 1.5A, 3.6A

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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.	U3 Sessions 1.1, 1.3, 1.4, 1.5, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 4.3, 4.4, 4.5 U8 Sessions 2.1, 2.2, 2.3A, 2.3, 2.4, 2.5, 3.1, 3.4, 3.5, 3.6
4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	U3 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 4.1 U8 Sessions 3.5A, 3.6