

MCGRAW-HILL

Everyday Mathematics

SADLIER

Common Core Progress Mathematics

Common Core State Standards for Mathematics

Grade 5 Crosswalk

1. Number Theory	2
2. Estimation and Computation	4
3. Geometry Explorations and the American Tour	9
4. Division	11
5. Fractions, Decimals, and Percents	14
6. Using Data; Addition and Subtraction of Fractions	17
7. Exponents and Negative Numbers	21
8. Fractions and Ratios	24
9. Coordinates, Area, Volume, and Capacity	31
10. Using Data; Algebra Concepts and Skills	37
11. Volume	41
12. Probability, Ratios, and Rates	45
Projects	46
Algorithm Projects	48

Unit 1
Number Theory

EVERYDAY MATHEMATICS, GRADE 5

1•1 Introducing the *Student Reference Book*—TE pp. 16–20

1•2 Rectangular Arrays—TE pp. 21–26

1•3 Factors—TE pp. 27–31

1•4 The Factor Captor Game—TE pp. 32–36

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.OA.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.

5.NBT.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.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.OA.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.

5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.

– continued on next page –

Unit 1
Number Theory

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

1•5 Divisibility—TE pp. 37–41

1•6 Prime and Composite Numbers—TE pp. 42–46

1•7 Square Numbers—TE pp. 47–51

1•8 Unsquaring Numbers—TE pp. 52–56

Lesson 18 Interpret Products of Fractions—pp. 158–165

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

– continued from previous page –

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.

5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the 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, $(a/b) \times (c/d) = ac/bd$.)

5.NBT.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.OA.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.

5.OA.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.

– continued on next page –

Unit 1
Number Theory

EVERYDAY MATHEMATICS, GRADE 5

1•9 Factor Strings and Prime Factorizations—TE pp. 57–61

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 2 Write and Interpret Numerical Expressions—
pp. 18–25

**Lesson 5 Powers of 10: Use Patterns and Whole-
Number Exponents—**pp. 48–55

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

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.

** Lesson includes content related to: 5.NBT.2

5.OA.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.

5.NBT.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.

Unit 2
Estimation and Computation

EVERYDAY MATHEMATICS, GRADE 5

2•1 Estimation Challenge—TE pp. 80–84

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

**Lesson 5 Powers of 10: Use Patterns and Whole-
Number Exponents—**pp. 48–55

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.

Unit 2
Estimation and Computation

EVERYDAY MATHEMATICS, GRADE 5	COMMON CORE PROGRESS MATHEMATICS, GRADE 5	COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
	<p>Lesson 25 Convert Customary Measurement Units—pp. 226–233</p> <hr/> <p>Lesson 26 Convert Metric Measurement Units—pp. 234–241</p>	<p>5.MD.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.</p>
<p>2•2 Addition of Whole Numbers and Decimals—TE pp. 85–90</p>	<p>Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55</p> <hr/> <p>Lesson 6 Read and Write Decimals to Thousandths—pp. 56–63</p> <hr/> <p>Lesson 7 Compare Decimals to Thousandths—pp. 64–71</p> <hr/> <p>Lesson 12 Add and Subtract Decimals to Hundredths—pp. 104–111</p>	<p>5.NBT.1 Recognize that in a multi-digit 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> <hr/> <p>5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</p> <hr/> <p>5.NBT.3b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <hr/> <p>5.NBT.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>
<p>2•3 Subtraction of Whole Numbers and Decimals—TE pp. 91–96</p>	<p>Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55</p> <hr/> <p>Lesson 6 Read and Write Decimals to Thousandths—pp. 56–63</p>	<p>5.NBT..1 Recognize that in a multi-digit 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> <hr/> <p>5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</p>

Unit 2
Estimation and Computation

EVERYDAY MATHEMATICS, GRADE 5

2•4 Addition and Subtraction Number Stories—TE pp. 97–102

2•5 Estimate Your Reaction Time—TE pp. 103–108

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 8 Round Decimals: Use Place Value—pp. 72–79

Lesson 12 Add and Subtract Decimals to Hundredths—pp. 104–111

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

Lesson 6 Read and Write Decimals to Thousandths—pp. 56–63

Lesson 12 Add and Subtract Decimals to Hundredths—pp. 104–111

Lesson 6 Read and Write Decimals to Thousandths—pp. 56–63

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.4 Use place value understanding to round decimals to any place.

5.NBT.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.

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.

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

5.NBT.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.

** Lesson includes content related to: 5.OA.1

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

Unit 2
Estimation and Computation

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

2•6 Chance Events—TE pp. 109–114

2•7 Estimating Products—TE pp. 115–119

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

Lesson 27 Problem Solving: Use Line Plots—pp. 242–249

Lesson 8 Round Decimals: Use Place Value—pp. 72–79

Lesson 13 Multiply Decimals to Hundredths—pp. 112–119

5.NBT.3b 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.3b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

5.MD.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.

** Lesson includes content related to: 5.NBT.3a, 5.NBT.7

* **Not correlated to Grade 5 Common Core standards.**

5.NBT.4 Use place value understanding to round decimals to any place.

5.NBT.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.

** Lesson includes content related to: 5.NBT.2

Unit 2
Estimation and Computation

EVERYDAY MATHEMATICS, GRADE 5

2•8 Multiplication of Whole Numbers and Decimals—TE pp. 120–125

2•9 The Lattice Method of Multiplication—TE pp. 126–131

2•10 Comparing Millions, Billions, and Trillions—TE pp. 132–137

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 6 Read and Write Decimals to Thousandths—pp. 56–63

Lesson 8 Round Decimals: Use Place Value—pp. 72–79

Lesson 13 Multiply Decimals to Hundredths—pp. 112–119

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 13 Multiply Decimals to Hundredths—pp. 112–119

Lesson 4 Understand Place Value—pp. 40–47

Lesson 25 Convert Customary Measurement Units—pp. 226–233

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

5.NBT.4 Use place value understanding to round decimals to any place.

5.NBT.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.

** Lesson includes content related to: 5.NBT.2

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.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.

5.NBT.A.1 Recognize that in a multi-digit 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.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

Unit 2
Estimation and Computation

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

Lesson 26 Convert Metric Measurement Units—pp. 234–241

these conversions in solving multi-step, real world problems.

Unit 3
Geometry Explorations and the American Tour

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

3•1 Introduction to the American Tour—TE pp. 154–159

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

5.NBT.3b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

3•2 American Tour: Population Data—TE pp. 160–164

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

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.

** Lesson includes content related to: 5.NBT.2

3•3 Exploring Angle Measures—TE pp. 165–169

* **Not correlated to Grade 5 Common Core standards.**

3•4 Using a Protractor—TE pp. 170–176

Lesson 36 Analyze Properties to Classify Two-Dimensional Figures—pp. 320–327

5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

Unit 3
Geometry Explorations and the American Tour

EVERYDAY MATHEMATICS, GRADE 5

3•5 Using a Compass—TE pp. 177–182

3•6 Congruent Triangles—TE pp. 183–188

3•7 Properties of Polygons—TE pp. 189–193

3•8 Regular Tessellations—TE pp. 194–198

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 8 Round Decimals: Use Place Value—pp. 72–79

Lesson 36 Analyze Properties to Classify Two-Dimensional Figures—pp. 320–327

Lesson 36 Analyze Properties to Classify Two-Dimensional Figures—pp. 320–327

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 36 Analyze Properties to Classify Two-Dimensional Figures—pp. 320–327

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.

** Lesson includes content related to: 5.NBT.3b

5.NBT.4 Use place value understanding to round decimals to any place.

5.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.

For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

5.G.B.4 Classify two-dimensional figures in a hierarchy based on properties

5.NBT.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.G.B.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.

For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

Unit 3 Geometry Explorations and the American Tour

EVERYDAY MATHEMATICS, GRADE 5	
3•9	Angles of Polygons—TE pp. 199–205
3•10	Solving Problems Using the Geometry Template—TE pp. 206–210

COMMON CORE PROGRESS MATHEMATICS, GRADE 5	
Lesson 36	Analyze Properties to Classify Two-Dimensional Figures —pp. 320–327
Lesson 6	Read and Write Decimals to Thousandths —pp. 56–63
Lesson 4	Understand Place Value —pp. 40–47

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5	
5.G.4	Classify two-dimensional figures in a hierarchy based on properties
**	Lesson includes content related to: 5.NF.5a
5.NBT.3a	Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
**	Lesson includes content related to: 5.NBT.2
*	Not correlated to Grade 5 Common Core standards.

Unit 4 Division

EVERYDAY MATHEMATICS, GRADE 5	
4•1	Division Facts and Extensions—TE pp. 230–235

COMMON CORE PROGRESS MATHEMATICS, GRADE 5	
Lesson 2	Write and Interpret Numerical Expressions —pp. 18–25
Lesson 5	Powers of 10: Use Patterns and Whole-Number Exponents —pp. 48–55

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5	
5.OA.2	Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. <i>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.</i>
5.NBT.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.

Unit 4
Division

EVERYDAY MATHEMATICS, GRADE 5

4•2 The Partial-Quotients Division Algorithm—TE pp. 236–241

4•3 American Tour: Finding Distances on a Map—TE pp. 242–247

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 10 Divide Whole Numbers: Use Place Value Strategies—pp. 88–95

Lesson 11 Divide Whole Numbers: Use Properties of Operations—pp. 96–103

Lesson 36 Analyze Properties to Classify Two-Dimensional Figures—pp. 320–327

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

Lesson 10 Divide Whole Numbers: Use Place Value Strategies—pp. 88–95

Lesson 11 Divide Whole Numbers: Use Properties of Operations—pp. 96–103

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category.
For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.

5.NF.5a 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.

** Lesson includes content related to: 5.OA.1

5.NBT.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.

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.OA.1

Unit 4

Division

EVERYDAY MATHEMATICS, GRADE 5

4•4 Partial-Quotients Algorithm Strategies—TE pp. 248–253

4•5 Division of Decimal Numbers—TE pp. 254–258

4•6 Interpreting the Remainder—TE pp. 259–264

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 10 Divide Whole Numbers: Use Place Value Strategies—pp. 88–95

Lesson 11 Divide Whole Numbers: Use Properties of Operations—pp. 96–103

Lesson 14 Divide Decimals to Hundredths—pp. 120–127

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

Lesson 10 Divide Whole Numbers: Use Place Value Strategies—pp. 88–95

Lesson 11 Divide Whole Numbers: Use Properties of Operations—pp. 96–103

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.NBT.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.

5.OA.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.

5.NBT.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.

Unit 4
Division

EVERYDAY MATHEMATICS, GRADE 5

4•7 Skills Review with First to 100—TE pp. 265–271

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 14 Divide Decimals to Hundredths—pp. 120–127

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NBT.3b

Unit 5
Fractions, Decimals, and Percents

EVERYDAY MATHEMATICS, GRADE 5

5•1 Fraction Review—TE pp. 290–295

5•2 Mixed Numbers—TE pp. 296–301

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 17 Interpret Fractions as Division—pp. 150–157

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.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.

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?

* **Not correlated to Grade 5 Common Core standards.**

Unit 5
Fractions, Decimals, and Percents

EVERYDAY MATHEMATICS, GRADE 5

5•3 Comparing and Ordering Fractions—TE pp. 302–307

5•4 Two Rules for Finding Equivalent Fractions—TE pp. 308–313

5•5 Fractions and Decimals: Part 1—TE pp. 314–318

5•6 Fractions and Decimals: Part 2—TE pp. 319–324

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

Lesson 16 Problem Solving: Add and Subtract Fractions—pp. 142–149

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

Lesson 8 Round Decimals: Use Place Value—pp. 72–79

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.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.

For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NF.A 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.

For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

* **Not correlated to Grade 5 Common Core standards.**

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

5.NBT.4 Use place value understanding to round decimals to any place.

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

Unit 5
Fractions, Decimals, and Percents

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5•7 Fractions and Decimals: Part 3—TE pp. 325–330

Lesson 8 Round Decimals: Use Place Value—pp. 72–79

5.NBT.4 Use place value understanding to round decimals to any place.

5•8 Using a Calculator to Convert Fractions to Percents—TE pp. 331–336

Lesson 17 Interpret Fractions as Division—pp. 150–157

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.

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?

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NBT.3a

5•9 Bar and Circle Graphs—TE pp. 337–342

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

** Lesson includes content related to: 5.NBT.4

5•10 The Percent Circle: Reading Circle Graphs—TE pp. 343–348

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

5.NBT.3a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.

* **Not correlated to Grade 5 Common Core standards.**

Unit 5
Fractions, Decimals, and Percents

EVERYDAY MATHEMATICS, GRADE 5
6•11 The Percent Circle: Making Circle Graphs—TE pp. 349–354
5•12 American Tour: School Days—TE pp. 355–359

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
* <i>Not correlated to Grade 5 Common Core standards.</i>
** Lesson includes content related to: 5.NBT.7
* <i>Not correlated to Grade 5 Common Core standards.</i>
** Lesson includes content related to: 5.OA.1

Unit 6
Using Data; Addition and Subtraction of Fractions

EVERYDAY MATHEMATICS, GRADE 5
6•1 Organizing Data—TE pp. 378–383
6•2 Natural Measures of Length—TE pp. 384–388
6•3 Stem-and-Leaf Plots for Hand and Finger Measures—TE pp. 389–394

COMMON CORE PROGRESS MATHEMATICS, GRADE 5
Lesson 27 Problem Solving: Use Line Plots —pp. 242–249

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
5.MD.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.
** Lesson includes content related to: 5.NBT.4
* <i>Not correlated to Grade 5 Common Core standards.</i>
** Lesson includes content related to: 5.NBT.3a, 5.MD.1
* <i>Not correlated to Grade 5 Common Core standards.</i>

Unit 6
Using Data; Addition and Subtraction of Fractions

EVERYDAY MATHEMATICS, GRADE 5	COMMON CORE PROGRESS MATHEMATICS, GRADE 5	COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
6•4 Mystery Plots—TE pp. 395–399		** Lesson includes content related to: 5.NBT.3a
6•5 Sample Size and Sound Conclusions—TE pp. 400–404		* Not correlated to Grade 5 Common Core standards.
6•6 Analysis of Sample Data—TE pp. 405–410		** Lesson includes content related to: 5.NBT.4
6•7 American Tour: Climate—TE pp. 411–416		* Not correlated to Grade 5 Common Core standards.
6•8 Using Benchmarks with Fraction Addition and Subtraction—TE pp. 417–422	Lesson 15 Add and Subtract Fractions with Unlike Denominators —pp. 134–141	** Lesson includes content related to: 5.NBT.7
	Lesson 16 Problem Solving: Add and Subtract Fractions —pp. 142–149	* Not correlated to Grade 5 Common Core standards.
		* Not correlated to Grade 5 Common Core standards.
		** Lesson includes content related to: 5.NBT.7
		5.NF.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, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$.)</i>
		5.NF.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.

Unit 6

Using Data; Addition and Subtraction of Fractions

EVERYDAY MATHEMATICS, GRADE 5	COMMON CORE PROGRESS MATHEMATICS, GRADE 5	COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
	<p>Lesson 17 Interpret Fractions as Division—pp. 150–157</p>	<p>5.NF.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.</p> <p><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>
<p>6•9 Clock Fractions and Common Denominators—TE pp. 423–428</p>	<p>Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141</p>	<p>5.NF.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.</p> <p><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>Lesson 16 Problem Solving: Add and Subtract Fractions—pp. 142–149</p>	<p>5.NF.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.</p> <p><i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p>

Unit 6

Using Data; Addition and Subtraction of Fractions

EVERYDAY MATHEMATICS, GRADE 5	COMMON CORE PROGRESS MATHEMATICS, GRADE 5	COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
	<p>Lesson 19 Find Areas of Rectangles: Tile and Multiply— pp. 166–173</p>	<p>5.NBT.5b 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. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.</p>
<p>6•10 Quick Common Denominators—TE pp. 429–433</p>	<p>Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141</p>	<p>5.NF.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.</p> <p><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>Lesson 16 Problem Solving: Add and Subtract Fractions— pp. 142–149</p>	<p>5.NF.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.</p> <p><i>For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.</i></p>

Unit 7
Exponents and Negative Numbers

EVERYDAY MATHEMATICS, GRADE 5

7•1 Exponential Notation—TE pp. 542–546

7•2 Exponential Notation for Powers of 10—TE pp. 547–551

7•3 Scientific Notation—TE pp. 552–556

7•4 Parentheses in Number Sentences—TE pp. 557–561

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 4 Understand Place Value—pp. 40–47

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 1 Use Grouping Symbols and Evaluate Numerical Expressions—pp. 10–17

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.1 Recognize that in a multi-digit 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.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.

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NBT.2

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

5.OA.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.

** Lesson includes content related to: 5.NBT.2

Unit 7
Exponents and Negative Numbers

EVERYDAY MATHEMATICS, GRADE 5

7•5 Order of Operations—TE pp. 562–567

7•6 American Tour: Line Graphs—TE pp. 568–572

7•7 Using Negative Numbers—TE pp. 573–577

7•8 Addition of Positive and Negative Numbers—TE pp. 578–583

7•9 Subtraction of Positive and Negative Numbers—TE pp. 584–589

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 1 Use Grouping Symbols and Evaluate Numerical Expressions—pp. 10–17

Lesson 2 Write and Interpret Numerical Expressions—pp. 18–25

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 7 Compare Decimals to Thousandths—pp. 64–71

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

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

5.OA.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.

5.NF.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.
For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NBT.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.

** Lesson includes content related to: 5.OA.1

* **Not correlated to Grade 5 Common Core standards.**

5.NBT.3b Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Unit 7
Exponents and Negative Numbers

EVERYDAY MATHEMATICS, GRADE 5

7•10 Line Plots—TE pp. 590–595

7•11 Calculator Practice: Working with Negative Numbers—TE pp. 596–599

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

Lesson 16 Problem Solving: Add and Subtract Fractions—pp. 142–149

Lesson 27 Problem Solving: Use Line Plots—pp. 242–249

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.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.

For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NF.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.

For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit ($1/2, 1/4, 1/8$). 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.

** Lesson includes content related to: 5.NBT.5, 5.NBT.6, 5.NBT.7

* **Not correlated to Grade 5 Common Core standards.**

Unit 8

Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

8•1 Review: Comparing Fractions—TE pp. 618–623

8•2 Adding Mixed Numbers—TE pp. 624–629

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

Lesson 16 Problem Solving: Add and Subtract Fractions—pp. 142–149

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.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.

For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NF.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.

For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

5.NF.5b 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.

5.NF.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

– continued on next page –

Unit 8
Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

8•3 Subtracting Mixed Numbers—TE pp. 630–635

Lesson 16 Problem Solving: Add and Subtract Fractions—
pp. 142–149

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

Lesson 16 Problem Solving: Add and Subtract Fractions—
pp. 142–149

– continued from previous page –

equivalent sum or difference of fractions with like denominators.

For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NF.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.

For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

5.NF.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.

For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NF.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

– continued on next page –

Unit 8
Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

8•4 Calculator Practice: Computation with Fractions—TE pp. 636–641

8•5 Fractions of Fractions—TE pp. 642–648

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

Lesson 16 Problem Solving: Add and Subtract Fractions—pp. 142–149

Lesson 18 Interpret Products of Fractions—pp. 158–165

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

estimate mentally and assess the reasonableness of answers.

For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

** Lesson includes content related to: 5.G.2, 5.G.3

5.NF.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.

For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$. (In general, $a/b + c/d = (ad + bc)/bd$.)

5.NF.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.
For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the 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, $(a/b) \times (c/d) = ac/bd$.)

Unit 8
Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

8•6 An Area Model for Fraction Multiplication—TE pp. 649–653

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

Lesson 21 Problem Solving: Multiply Fractions and Mixed Numbers—pp. 182–189

Lesson 18 Interpret Products of Fractions—pp. 158–165

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

Lesson 21 Problem Solving: Multiply Fractions and Mixed Numbers—pp. 182–189

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.5a 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.

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.

5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the 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, $(a/b) \times (c/d) = ac/bd$.)

5.NF.5a 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.

5.NF.5b 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.

5.NF.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.

Unit 8

Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

8•7 Multiplication of Fractions and Whole Numbers—TE pp. 654–658

8•8 Multiplication of Mixed Numbers—TE pp. 659–663

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 18 Interpret Products of Fractions—pp. 158–165

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

Lesson 21 Problem Solving: Multiply Fractions and Mixed Numbers—pp. 182–189

Lesson 18 Interpret Products of Fractions—pp. 158–165

Lesson 19 Find Areas of Rectangles: Tile and Multiply—pp. 166–173

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the 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, $(a/b) \times (c/d) = ac/bd$.)

5.NF.5b 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.

5.NF.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.

5.NF.4a Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the 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, $(a/b) \times (c/d) = ac/bd$.)

5.NF.4b 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

– continued on next page – .

Unit 8
Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

5.NF.5a 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.

Lesson 20 Interpret Multiplication of Fractions as Scaling—pp. 174–181

5.NF.5b 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.

Lesson 21 Problem Solving: Multiply Fractions and Mixed Numbers—pp. 182–189

5.NF.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.

8•9 Finding a Percent of a Number—TE pp. 664–668

* **Not correlated to Grade 5 Common Core standards.**

8•10 Relating Fractional Units to the Whole—TE pp. 669–673

* **Not correlated to Grade 5 Common Core standards.**

8•11 American Tour: Rural and Urban—TE pp. 674–679

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NF.2

Unit 8

Fractions and Ratios

EVERYDAY MATHEMATICS, GRADE 5

8•12 Fraction Division—TE pp. 680–685

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 22 Divide Unit Fractions by Whole Numbers—pp. 190–197

Lesson 23 Divide Whole Numbers by Unit Fractions—pp. 198–205

Lesson 24 Problem Solving: Divide Unit Fractions and Whole Numbers—pp. 206–213

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.

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 $(1/12) \times 4 = 1/3$.

5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.

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 $20 \times (1/5) = 4$.

5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.

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?

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

9•1 Hidden Treasure: A Coordinate Game—TE pp. 704–709

9•2 Coordinate Graphs: Part 1—TE pp. 710–715

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 34 Understand Points on the Coordinate Plane—pp. 304–311

Lesson 35 Graph Points to Represent Problem Situations—pp. 312–319

Lesson 34 Understand Points on the Coordinate Plane—pp. 304–311

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NBT.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.G.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 (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).

5.G.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.

** Lesson includes content related to: 5.NF.4a

5.G.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

– continued on next page –

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

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 (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

9•3 Coordinate Graphs: Part 2—TE pp. 716–721

Lesson 35 Graph Points to Represent Problem Situations—pp. 312–319

5.G.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.

** Lesson includes content related to: 5.NBT.5

Lesson 34 Understand Points on the Coordinate Plane—pp. 304–311

5.G.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 (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

Lesson 35 Graph Points to Represent Problem Situations—pp. 312–319

5.G.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.

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

9•4 Areas of Rectangles—TE pp. 722–728

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 19 Find Areas of Rectangles: Tile and Multiply—pp. 166–173

Lesson 22 Divide Unit Fractions by Whole Numbers—pp. 190–197

Lesson 23 Divide Whole Numbers by Unit Fractions—pp. 198–205

Lesson 24 Problem Solving: Divide Unit Fractions and Whole Numbers—pp. 206–213

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

** Lesson includes content related to: 5.MD.3a, 5.MD.4, 5.MD.5b

5.NF.4b 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. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.
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 $(1/12) \times 4 = 1/3$.

5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.
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 $20 \times (1/5) = 4$.

5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.
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?

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

9•5 The Rectangle Method for Finding Area—TE pp. 729–734

9•6 Formulas for the Areas of Triangles and Parallelograms—TE pp. 735–740

9•7 Earth's Water Surface—TE pp. 741–746

9•8 Volume of Rectangular Prisms—TE pp. 747–752

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 32 Problem Solving: Apply Volume Formulas for Prisms—pp. 282–289

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 16 Problem Solving: Add and Subtract Fractions—pp. 142–149

Lesson 28 Understand Concepts of Volume Measurement—pp. 250–257

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.MD.5b Apply the formulas $V = l \times w \times h$ 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.

** Lesson includes content related to: 5.MD.3a, 5.MD.4

5.NBT.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.NF.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.

For example, recognize an incorrect result $2/5 + 1/2 = 3/7$, by observing that $3/7 < 1/2$.

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.MD.3a, 5.NF.6

5.MD.3a 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.

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

9•9 Volume of Right Prisms—TE pp. 753–759

Lesson 28 Understand Concepts of Volume Measurement—pp. 250–257

5.MD.3b 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.

Lesson 29 Measure Volume—pp. 258–265

5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

Lesson 30 Find Volume: Relate Packing of Unit Cubes to Multiplying—pp. 266–273

5.MD.5a 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.

Lesson 31 Find Volume: Use the Associate Property—pp. 274–281

Lesson 32 Problem Solving: Apply Volume Formulas for Prisms—pp. 282–289

5.MD.5b Apply the formulas $V = l \times w \times h$ 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.

** Lesson includes content related to: 5.NBT.4, 5.NBT.7

Lesson 28 Understand Concepts of Volume Measurement—pp. 250–257

5.MD.3a 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.

Lesson 32 Problem Solving: Apply Volume Formulas for Prisms—pp. 282–289

5.MD.5b Apply the formulas $V = l \times w \times h$ 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.

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

9•10 Capacity: Liter, Milliliter, and Cubic Centimeter—TE
pp. 760–765

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 33 Problem Solving: Decompose Figures to Find Volume—pp. 290–297

Lesson 26 Convert Metric Measurement Units—pp. 234–241

Lesson 28 Understand Concepts of Volume Measurement—pp. 250–257

Lesson 28 Understand Concepts of Volume Measurement—pp. 250–257

Lesson 29 Measure Volume—pp. 258–265

Lesson 30 Find Volume: Relate Packing of Unit Cubes to Multiplying—pp. 266–273

Lesson 31 Find Volume: Use the Associate Property—pp. 274–281

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.MD.5c 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.

5.MD.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.

5.MD.3a 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.

5.MD.3b 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.

5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

5.MD.5a 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.

Unit 9
Coordinates, Area, Volume, and Capacity

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

Lesson 32 Problem Solving: Apply Volume Formulas for Prisms—pp. 282–289

5.MD.5b Apply the formulas $V = l \times w \times h$ 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.

Unit 10
Using Data; Algebra Concepts and Skills

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

10•1 Pan-Balance Problems—TE pp. 784–790

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

5.NBT.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.

** Lesson includes content related to: 5.NF.4a

10•2 Pan-Balance Problems with Two Balances—TE pp. 791–796

Lesson 27 Problem Solving: Use Line Plots—pp. 242–249

5.MD.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.

** Lesson includes content related to: 5.NF.5a

Unit 10
Using Data; Algebra Concepts and Skills

EVERYDAY MATHEMATICS, GRADE 5

10•3 Algebraic Expressions—TE pp. 797–802

10•4 Rules, Tables, and Graphs: Part 1—TE pp. 803–808

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 2 Write and Interpret Numerical Expressions—
 pp. 18–25

Lesson 3 Analyze Numerical Patterns—pp. 26–33

Lesson 34 Understand Points on the Coordinate Plane—
 pp. 304–311

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.OA.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.

** Lesson includes content related to: 5.OA1, 5.NBT.2, 5.NBT.5a, 5.NBT.5b

5.OA.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.

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.

5.G.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

– continued on next page –

Unit 10

Using Data; Algebra Concepts and Skills

EVERYDAY MATHEMATICS, GRADE 5

10•5 American Tour: Old Faithful's Next Eruption—TE pp. 809–813

10•6 Rules, Tables, and Graphs: Part 2—TE pp. 814–819

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 35 Graph Points to Represent Problem Situations—pp. 312–319

Lesson 25 Convert Customary Measurement Units—pp. 226–233

Lesson 26 Convert Metric Measurement Units—pp. 234–241

Lesson 3 Analyze Numerical Patterns—pp. 26–33

Lesson 34 Understand Points on the Coordinate Plane—pp. 304–311

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x -axis and x -coordinate, y -axis and y -coordinate).

5.G.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.

5.MD.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.

5.OA.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.

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.

5.G.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

– continued on next page –

Unit 10
Using Data; Algebra Concepts and Skills

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

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 (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).

10♦7 Reading Graphs—TE pp. 820–824

Lesson 35 Graph Points to Represent Problem Situations—pp. 312–319

5.G.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.

** Lesson includes content related to: 5.NBT.7, 5.NF.5

Lesson 34 Understand Points on the Coordinate Plane—pp. 304–311

5.G.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 (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).

** Lesson includes content related to: 5.NBT.4

Unit 10
Using Data; Algebra Concepts and Skills

EVERYDAY MATHEMATICS, GRADE 5
10•8 Circumference of a Circle—TE pp. 825–830
10•9 Area of a Circle—TE pp. 831–836

COMMON CORE PROGRESS MATHEMATICS, GRADE 5
Lesson 8 Round Decimals: Use Place Value —pp. 72–79

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
5.NBT.4 Use place value understanding to round decimals to any place.
* Not correlated to Grade 5 Common Core standards.
** Lesson includes content related to: 5.NBT.1

Unit 11
Volume

EVERYDAY MATHEMATICS, GRADE 5
11•1 Review of Geometric Solids: Part 1—TE pp. 856–860

COMMON CORE PROGRESS MATHEMATICS, GRADE 5
Lesson 28 Understand Concepts of Volume Measurement —pp. 250–257
Lesson 28 Understand Concepts of Volume Measurement —pp. 250–257
Lesson 29 Measure Volume —pp. 258–265
Lesson 30 Find Volume: Relate Packing of Unit Cubes to Multiplying —pp. 266–273
Lesson 31 Find Volume: Use the Associate Property —pp. 274–281

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
5.MD.3a 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.
5.MD.3b 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.
5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.
5.MD.5a 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.

Unit 11
Volume

EVERYDAY MATHEMATICS, GRADE 5	COMMON CORE PROGRESS MATHEMATICS, GRADE 5	COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
11•2 Review of Geometric Solids: Part 2—TE pp. 861–865	Lesson 32 Problem Solving: Apply Volume Formulas for Prisms —pp. 282–289	5.MD.5b Apply the formulas $V = l \times w \times h$ 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.
11•3 Volume of Cylinders—TE pp. 866–871	Lesson 8 Round Decimals: Use Place Value —pp. 72–79	* Not correlated to Grade 5 Common Core standards.
	Lesson 25 Convert Customary Measurement Units —pp. 226–233	5.NBT.4 Use place value understanding to round decimals to any place.
	Lesson 26 Convert Metric Measurement Units —pp. 234–241	5.MD.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.
	Lesson 30 Find Volume: Relate Packing of Unit Cubes to Multiplying —pp. 266–273	5.MD.5a 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.
	Lesson 31 Find Volume: Use the Associate Property —pp. 274–281	
	Lesson 32 Problem Solving: Apply Volume Formulas for Prisms —pp. 282–289	5.MD.5b Apply the formulas $V = l \times w \times h$ 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.
		** Lesson includes content related to: 5.MD.3a, 5.MD.3b, 5.MD.4

Unit 11
Volume

EVERYDAY MATHEMATICS, GRADE 5

11•4 Volume of Pyramids and Cones—TE pp. 872–877

11•5 Finding Volume by a Displacement Method—TE pp. 878–883

11•6 Capacity and Weight—TE pp. 884–890

11•7 Surface Area—TE pp. 891–894

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 23 Divide Whole Numbers by Unit Fractions—pp. 198–205

Lesson 25 Convert Customary Measurement Units—pp. 226–233

Lesson 26 Convert Metric Measurement Units—pp. 234–241

Lesson 33 Problem Solving: Decompose Figures to Find Volume—pp. 290–297

Lesson 5 Powers of 10: Use Patterns and Whole-Number Exponents—pp. 48–55

Lesson 15 Add and Subtract Fractions with Unlike Denominators—pp. 134–141

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.
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 $20 \times (1/5) = 4$.

** Lesson includes content related to: 5.NF.7a

5.MD.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.

5.MD.5c 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.

5.NBT.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.

** Lesson includes content related to: 5.OA.1, 5.MD.1

5.NF.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

– continued on next page –

Unit 11
Volume

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

– continued from previous page –

equivalent sum or difference of fractions with like denominators.

*For example, $2/3 + 5/4 = 8/12 + 15/12 = 23/12$.
(In general, $a/b + c/d = (ad + bc)/bd$.)*

** Lesson includes content related to: 5.NF.2, 5.NF.7c, 5.MD.5a, 5.MD.5c

Unit 12
Probability, Ratios, and Rates

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

12•1 Factor Trees—TE pp. 914–919

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NF.7a, 5.NF.7b, 5.NF.7c

12•2 Choices, Tree Diagrams, and Probability—TE pp. 920–925

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NBT.7

12•3 American Tour: Ratio Exploration—TE pp. 926–930

Lesson 22 Divide Unit Fractions by Whole Numbers—pp. 190–197

5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.
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 $(1/12) \times 4 = 1/3$.

Unit 12
Probability, Ratios, and Rates

EVERYDAY MATHEMATICS, GRADE 5

12•4 Ratios of Parts to Wholes—TE pp. 931–935

12•5 Number Models for Ratio Number Stories—TE pp. 936–941

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 23 Divide Whole Numbers by Unit Fractions—pp. 198–205

Lesson 22 Divide Unit Fractions by Whole Numbers—pp. 190–197

Lesson 23 Divide Whole Numbers by Unit Fractions—pp. 198–205

Lesson 24 Problem Solving: Divide Unit Fractions and Whole Numbers—pp. 206–213

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.
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 $20 \times (1/5) = 4$.

** Lesson includes content related to: 5.NF.7c

* **Not correlated to Grade 5 Common Core standards.**

5.NF.7a Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.
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 $(1/12) \times 4 = 1/3$.

5.NF.7b Interpret division of a whole number by a unit fraction, and compute such quotients.
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 $20 \times (1/5) = 4$.

5.NF.7c Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem.

– continued on next page –

Unit 12
Probability, Ratios, and Rates

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

12•6 Finding Your Heart Rate—TE pp. 942–945

12•7 Collecting, Graphing, and Interpreting Data—TE pp. 946–951

12•8 Finding Your Cardiac Output—TE pp. 952–956

Lesson 34 Understand Points on the Coordinate Plane—
pp. 304–311

– continued from previous page –
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?

* **Not correlated to Grade 5 Common Core standards.**

* **Not correlated to Grade 5 Common Core standards.**

** Lesson includes content related to: 5.NBT.4

5.G.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 (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

Projects

EVERYDAY MATHEMATICS, GRADE 5

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

1 The Sieve of Eratosthenes—TE pp. 440–442, xxx–951

2 Deficient, Abundant, and Perfect Numbers—TE pp. 443–445, 952–955

* **Not correlated to Grade 5 Common Core standards.**

* **Not correlated to Grade 5 Common Core standards.**

Projects

EVERYDAY MATHEMATICS, GRADE 5	COMMON CORE PROGRESS MATHEMATICS, GRADE 5	COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5
3 An Ancient Multiplication Algorithm—TE pp. 446–448, 956–958		** Lesson includes content related to: 5.OA.1
4 “Magic” Computation Tricks—TE pp. 449–452, 959–963		* Not correlated to Grade 5 Common Core standards.
5 How Would You Spend \$1,000,000?—TE pp. 453–455, 964–966		* Not correlated to Grade 5 Common Core standards.
6 Sports Areas—TE pp. 456–458, 967–971	Lesson 25 Convert Customary Measurement Units —pp. 226–233	* Not correlated to Grade 5 Common Core standards.
7 Polygon Areas and Pick’s Formula—TE pp. 459–461, 972–975	Lesson 26 Convert Metric Measurement Units —pp. 234–241	5.MD.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.
8 Pendulums—TE pp. 462–466, 972–975	Lesson 35 Graph Points to Represent Problem Situations —pp. 312–319	* Not correlated to Grade 5 Common Core standards.
9 Adding Volumes of Solid Figures—TE pp. 466A–466D, 972–975	Lesson 28 Understand Concepts of Volume Measurement —pp. 250–257	** Lesson includes content related to: 5.OA.1
	Lesson 28 Understand Concepts of Volume Measurement —pp. 250–257	5.G.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.
	Lesson 29 Measure Volume —pp. 258–265	5.MD.3a 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.
		5.MD.3b 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.
		5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

Projects

EVERYDAY MATHEMATICS, GRADE 5	

COMMON CORE PROGRESS MATHEMATICS, GRADE 5	
Lesson 32	Problem Solving: Apply Volume Formulas for Prisms —pp. 282–289
Lesson 33	Problem Solving: Decompose Figures to Find Volume —pp. 290–297

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5	
5.MD.5b	Apply the formulas $V = l \times w \times h$ 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.
5.MD.5c	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.
**	Lesson includes content related to: 5.MD.5a

Algorithm Projects

EVERYDAY MATHEMATICS, GRADE 5	
1	U.S. Traditional Addition—TE pp. A1–A5
2	U.S. Traditional Addition: Decimals—TE pp. A6–A10
3	U.S. Traditional Subtraction—TE pp. A11–A15
4	U.S. Traditional Subtraction: Decimals—TE pp. A16–A21

COMMON CORE PROGRESS MATHEMATICS, GRADE 5	
Lesson 12	Add and Subtract Decimals to Hundredths —pp. 104–111
Lesson 12	Add and Subtract Decimals to Hundredths —pp. 104–111

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5	
*	Not correlated to Grade 5 Common Core standards.
5.NBT.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.
*	Not correlated to Grade 5 Common Core standards.
5.NBT.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.

Algorithm Projects

EVERYDAY MATHEMATICS, GRADE 5

5 U.S. Traditional Multiplication—TE pp. A22–A26

6 U.S. Traditional Multiplication: Decimals—TE pp. A26–A30

7 U.S. Traditional Long Division—TE pp. A31–A39

8 U.S. Traditional Long Division with Decimal Dividends—TE pp. A40–A45

COMMON CORE PROGRESS MATHEMATICS, GRADE 5

Lesson 9 Multiply Fluently with Multi-Digit Numbers— pp. 80–87

Lesson 9 Multiply Fluently with Multi-Digit Numbers— pp. 80–87

Lesson 13 Multiply Decimals to Hundredths— pp. 112–119

Lesson 10 Divide Whole Numbers: Use Place Value Strategies— pp. 88–95

Lesson 11 Divide Whole Numbers: Use Properties of Operations— pp. 96–103

Lesson 14 Divide Decimals to Hundredths— pp. 120–127

COMMON CORE STATE STANDARDS FOR MATHEMATICS, GRADE 5

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

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

5.NBT.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.

5.NBT.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.NBT.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.