

4th Grade - Chapter 1 - Place Value

Numbers and Operations in Base Ten

8 days

September 2 to September 12

September 1 HOLIDAY	September 2 Welcome Back to School	September 3 Am I Ready? Video Introduction My Math Words Foldables Activity <i>Pg 1-10</i>	September 4 Lesson 1 Place Value <i>Pg 11-16</i>	September 5 Lesson 2 Read & Write Multi-Digit Numbers <i>Pg 17-22</i>
September 8 Lesson 3 Compare Numbers <i>Pg 23-28</i>	September 9 Lesson 4 Order Numbers <i>Pg 29-34</i>	September 10 Check My Progress Lesson 5 Use Place Value to Round <i>Pg 35-42</i>	September 11 Lesson 5 Problem Solving: Use Place Value to Round <i>Pg 43-48</i>	September 12 Review and Reflect <i>Pg 49-52</i> CA-4-1

Common Core State Standards

Number and Operations in Base Ten
Generalize place value understanding for multi-digit whole numbers.
 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.
 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.
 3. Use place value understanding to round multi-digit whole numbers to any place.

Chapter 1 - Vocabulary

digit
 place value
 expanded form
 period
 standard form
 word form
 is equal to ($=$)
 is greater than ($>$)
 is less than ($<$)
 number line

What Students Should Be Able To Do

- ☆Identify the place value of digits in multi-digit numbers.
- ☆Read and write multi-digit whole numbers.
- ☆Compare numbers using a number line and place-value chart.
- ☆Order numbers by using a place-value chart and comparing the digit values.
- ☆Estimate numbers by rounding.

IXL Alignment

4TH GRADE
 A.1, A.2, A.6, A.9, K.3

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically. *
- 6) Attend to precision. *
- 7) Look for and make use of structure. *
- 8) Look for and express regularity in repeated reasoning.

Potential Parent Support

Roll 4 dice and create different numbers, with each die being a place value in a created number. For example, I roll a 4, 5, 2 & 6, I can create 2,546. 2 is in the thousands place, 5 is in the hundreds place,... Other options include what is the biggest/smallest number you can create? What is the number in the tens place?

4th Grade - Chapter 2 - Add and Subtract Whole Numbers

Numbers and Operations in Base Ten

12 days

September 15 to September 30

<p>September 15 Am I Ready? Video Introduction My Math Words Foldables Activity <i>Pg 53-60</i></p>	<p>September 16 Lesson 1 Addition Properties and Subtraction Rules <i>Pg 61-66</i></p>	<p>September 17 District Summative Assessment SA-4-F</p>	<p>September 18 Lesson 2 Addition and Subtraction Patterns <i>Pg 67-72</i></p>	<p>September 19 Lesson 3 Add and Subtract Mentally <i>Pg 73-78</i></p>
<p>September 22 Lesson 4 Estimate Sums and Differences <i>Pg 79-84</i></p>	<p>September 23 Check My Progress Lesson 5 Add Whole Numbers <i>Pg 85-92</i></p>	<p>September 24 Lesson 6 Subtract Whole Numbers <i>Pg 93-98</i></p>	<p>September 25 Lesson 7 Subtract Across Zeros <i>Pg 99-104</i></p>	<p>September 26 Check My Progress Lesson 8 Problem Solving: Draw a Diagram <i>Pg 105-112</i></p>
<p>September 29 Lesson 9 Solve Multi-Step Word Problems <i>Pg 113-118</i></p>	<p>September 30 Review and Reflect <i>Pg 119-122</i> CA-4-2</p>			

Common Core State Standards

Operations and Algebraic Thinking
Use the four operations with whole numbers to solve problems.

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.

Generate and analyze patterns.

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.

Number and Operations in Base Ten
Generalize place value understanding for multi-digit whole numbers.

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

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

4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.

Chapter 2 - Vocabulary

Commutative Property of Addition
Associative Property of Addition
Identity Property of Addition
unknown
minuend
subtrahend
equation
variable

What Students Should Be Able To Do

- ☆Use addition properties and subtraction rules to add and subtract.
- ☆Use patterns to solve addition and subtraction problems.
- ☆Use mental math to add and subtract.
- ☆Estimate sums and differences of multi-digit numbers.
- ☆Add multi-digit whole numbers.
- ☆Subtract multi-digit whole numbers.
- ☆Subtract multi-digit numbers, when some digits are zeros.
- ☆Solve multi-step word problems using addition and subtraction.

IXL Alignment

4TH GRADE
B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.8, B.9, C.1, C.2, C.3, C.4, C.5, C.6, C.7, K.1

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically. *
- 6) Attend to precision. *
- 7) Look for and make use of structure. *
- 8) Look for and express regularity in repeated reasoning. *

Potential Parent Support
Purchase flash cards and practice basic addition and subtraction facts. Digital flashcards are available at <http://www.factmonster.com/math/flashcards.html>. **These facts need to be memorized by 4th grade.**

4th Grade - Chapter 3 - Understand Multiplication and Division

Numbers and Operations in Base Ten

11 days

October 1 to October 17

		October 1 Am I Ready? Video Introduction My Math Words Foldables Activities Pg 125-134	October 2 Lesson 1 Relate Multiplication and Division Pg 135-140	October 3 Lesson 2 Relate Division and Subtraction Pg 141-146
October 6 Lesson 3 Multiplication as Comparison Pg 147-152	October 7 Lesson 4 Compare to Solve Problems Pg 153-158	October 8 Check My Progress Lesson 5 Multiplication Properties and Division Rules Pg 159-166	October 9 Lesson 6 The Associative Property of Multiplication Pg 167-172	October 10 INSERVICE DAY
October 13 Lesson 7 Factors and Multiples Pg 173-178	October 14 Lesson 8 Problem Solving: Reasonable Answers Pg 179-184	October 15 Catch Up Day	October 16 Review and Reflect Pg 185-188	October 17 CA-4-3

Common Core State Standards

Operations and Algebraic Thinking

Use the four operations with whole numbers to solve problems.

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.

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.

Gain familiarity with factors and multiples.

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.

Number and Operations in Base Ten

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

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.

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

IXL Alignment

4TH GRADE

D.1, D.2, D.3, D.4, D.7, D.13

Chapter 3 - Vocabulary

dividend
divisor
fact family
factor
product
quotient
repeated subtraction
Commutative Property
identity Property
Zero Property
Associative Property of Multiplication
decompose
multiple

What Students Should Be Able To Do

- ☆Understand how multiplication and division are related.
- ☆Relate division and subtraction.
- ☆Recognize the comparison of two groups as another strategy to use when multiplying.
- ☆Use comparison to solve problems.
- ☆Use multiplication properties and division rules.
- ☆Use the Associative Property of Multiplication to solve problems.
- ☆Find factors and multiples of whole numbers.

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically. *
- 6) Attend to precision.
- 7) Look for and make use of structure. *
- 8) Look for and express regularity in repeated reasoning. *

Potential Parent Support

Purchase flash cards and practice basic multiplication and division facts. Digital flashcards are available at <http://www.factmonster.com/math/flashcards.html>. **Multiplication facts need to be memorized by the end of 4th grade.**

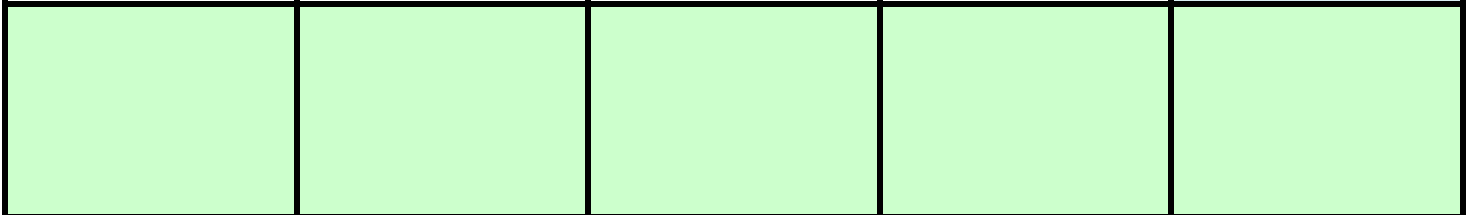
4th Grade - Chapter 14 - Geometry

Geometry

14 days

October 20 to November 7

<p>October 20 Am I Ready? Video Introduction My Math Words Foldables Activity?? Pg 863-872</p>	<p>October 21 Lesson 1 Draw Points, Lines and Rays Pg 873-878</p>	<p>October 22 Lesson 2 Draw Parallel and Perpendicular Lines Pg 879-884</p>	<p>October 23 Check My Progress Lesson 3 Hands On: Model Angles Pg 885-892</p>	<p>October 24 Lesson 4 Classify Angles Pg 893-898</p>
<p>October 27 Lesson 5 Measure Angles Pg 899-904</p>	<p>October 28 Lesson 6 Draw Angles Pg 905-910</p>	<p>October 29 Lesson 7 Solve Problems with Angles Pg 911-916</p>	<p>October 30 Check My Progress Lesson 8 Triangles Pg 917-924</p>	<p>October 31 Lesson 9 Quadrilaterals Pg 925-930</p>
<p>November 3 Lesson 10 Draw Lines of Symmetry Pg 931-936</p>	<p>November 4 Lesson 11 Problem Solving: Make a Model Pg 937-942</p>	<p>November 5 Catch Up Day</p>	<p>November 6 Review and Reflect Pg 943-948</p>	<p>November 7 CA-4-14</p>



<p>Common Core State Standards</p> <p>Geometry Draw and identify lines and angles, and classify shapes by properties of their lines and angles. 1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. 2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. 3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.</p> <p>Measurement and Data Geometric measurement: understand concepts of angle and measure angles. 5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees. 6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. 7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.</p>	<p>Chapter 14 - Vocabulary</p> <table style="width: 100%; border: none;"> <tr> <td>point</td> <td>line</td> </tr> <tr> <td>ray</td> <td>endpoint</td> </tr> <tr> <td>line segment</td> <td></td> </tr> <tr> <td>parallel</td> <td></td> </tr> <tr> <td>intersecting</td> <td></td> </tr> <tr> <td>perpendicular</td> <td></td> </tr> <tr> <td>angle</td> <td>right angle</td> </tr> <tr> <td>acute angle</td> <td>obtuse angle</td> </tr> <tr> <td>degree</td> <td>one-degree</td> </tr> <tr> <td>parallelogram</td> <td>rectangle</td> </tr> <tr> <td>rhombus</td> <td>square</td> </tr> <tr> <td>trapezoid</td> <td></td> </tr> <tr> <td>line symmetry</td> <td>line of symmetry</td> </tr> </table> <p>What Students Should Be Able To Do</p> <ul style="list-style-type: none"> ☆Draw points, lines, line segments, and rays and identify these in two-dimensional figures. ☆Draw parallel, intersecting, and perpendicular lines and identify these in two-dimensional figures. ☆Understand concepts of angles and angle measurement. ☆Use concepts of angle measurement to classify angles. ☆Use a protractor to measure angles to the nearest degree. ☆Use a protractor to draw angles of a specified measure. ☆Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical situations. ☆Classify triangles based on angle measure and describe triangles using their attributes. ☆Classify quadrilaterals using their attributes. ☆Identify figures with line symmetry and draw lines of symmetry. 	point	line	ray	endpoint	line segment		parallel		intersecting		perpendicular		angle	right angle	acute angle	obtuse angle	degree	one-degree	parallelogram	rectangle	rhombus	square	trapezoid		line symmetry	line of symmetry
point	line																										
ray	endpoint																										
line segment																											
parallel																											
intersecting																											
perpendicular																											
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acute angle	obtuse angle																										
degree	one-degree																										
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rhombus	square																										
trapezoid																											
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<p>IXL Alignment</p> <p>4TH GRADE P.4, P.6, P.11, P.12, P.13, P.14, P.15, P.24, P.25, P.26, P.27</p>	<p>Standards for Mathematical Practice</p> <ul style="list-style-type: none"> 1) Make sense of problems and persevere in solving them. * 2) Reason abstractly and quantitatively. * 3) Construct viable arguments and critique the reasoning of others. * 4) Model with mathematics. * 5) Use appropriate tools strategically. * 6) Attend to precision. * 7) Look for and make use of structure. * 8) Look for and express regularity in repeated reasoning. * 																										

Potential Parent Support
Find items around the house that have both vertical and horizontal symmetry. For example, "My couch has vertical symmetry."

4th Grade - Chapter 4 - Multiply with One-Digit Numbers

Numbers and Operations in Base Ten

14 days

November 12 to December 5

<p>November 10 TEACHER INSERVICE</p>	<p>November 11 HOLIDAY</p>	<p>November 12 Am I Ready? Video Introduction My Math Words Foldables Activities Pg 189-196</p>	<p>November 13 Lesson 1 Multiples of 10, 100 and 1000 Pg 197-202</p>	<p>November 14 Lesson 2 Round to Estimate Products Pg 203-208</p>
<p>October 17 Lesson 3 Hands On: Use Place Value to Multiply Pg 209-214</p>	<p>November 18 Lesson 4 Hands On: Use Models to Multiply Pg 215-220</p>	<p>November 19 Check My Progress Lesson 5 Multiply by a Two-Digit Number Pg 221-228</p>	<p>November 20 Lesson 6 Hands On: Model Regrouping Pg 229-234</p>	<p>November 21 Lesson 7 The Distributive Property Pg 235-240</p>
<p>December 1 Lesson 8 Multiply with Regrouping Pg 241-246</p>	<p>December 2 Lesson 9 Multiply by a Multi-Digit Number Pg 247-252</p>	<p>December 3 Check My Progress Lesson 10 Problem Solving: Estimate or Exact Answer Pg 253-260</p>	<p>December 4 Lesson 11 Multiply Across Zeros Pg 261-266</p>	<p>December 5 Review and Reflect Pg 267-272 CA-4-4</p>

Common Core State Standards

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

Gain familiarity with factors and multiples.
4. 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.

Number and Operations in Base Ten
Generalize place value understanding for multi-digit whole numbers.
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.
3. Use place value understanding to round multi-digit whole numbers to any place.

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

IXL Alignment

4TH GRADE
D.5, D.8, D.9, D.17, D.18

Chapter 4 - Vocabulary

partial products
regroup
Distributive Property

What Students Should Be Able To Do

- ☆Multiply multiples of 10, 100 and 1000 using basic facts and patterns.
- ☆Estimate products by rounding.
- ☆Explore multiplication using models.
- ☆Explore multiplication using area models and partial products.
- ☆Multiply a multi-digit number by a one-digit number.
- ☆Use the Distributive Property to make multiplication easier.
- ☆Multiply multi-digit numbers with zeros by a one-digit number.

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically. *
- 6) Attend to precision. *
- 7) Look for and make use of structure. *
- 8) Look for and express regularity in repeated reasoning.

Potential Parent Support

Have your student roll 2 dice and create a two-digit number. Say the created number and multiply it mentally by 10, 100 and 1000. Example, I rolled a 43. $43 \times 10 = 430$, $43 \times 100 = 4300$ and $43 \times 1000 = 43,000$.

4th Grade - Chapter 5 - Multiply with Two-Digit Numbers

Numbers and Operations in Base Ten

10 days

November 11 to November 22

<p>December 8 Am I Ready? Video Introduction My Math Words Foldables Activity Pg 271-278</p>	<p>December 9 Lesson 1 Multiply by Tens Pg 279-284</p>	<p>December 10 Lesson 2 Estimate Products Pg 285-290</p>	<p>December 11 Check My Progress Lesson 3 Hands On: Use the Distributive Property to Multiply Pg 291-298</p>	<p>December 12 Lesson 4 Multiply by a Two-Digit Number Pg 299-304</p>
<p>December 15 Lesson 5 Solve Multi-Step Word Problems Pg 305-310</p>	<p>December 16 Lesson 6 Problem Solving: Make A Table Pg 311-316</p>	<p>December 17 Review and Reflect Pg 317-322</p>	<p>December 18 CA-4-5</p>	<p>December 19 MERRY CHRISTMAS!!</p>

Common Core State Standards

Operations and Algebraic Thinking
 Use the four operations with whole numbers to solve problems.
 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.

Number and Operations in Base Ten
 Generalize place value understanding for multi-digit whole numbers.
 3. Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.
 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.

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.

Chapter 5 - Vocabulary

operation

- What Students Should Be Able To Do**
- ☆Use properties and algorithms to multiply by tens.
 - ☆Estimate products by rounding.
 - ☆Explore multiplying by two-digit numbers.
 - ☆Multiply two, two-digit numbers.
 - ☆Use multiplication to solve multi-step word problems.

IXL Alignment

4TH GRADE
 D.6, D.10, D.11, D.12, D.14, D.15, D.16, D.19

- Standards for Mathematical Practice**
- 1) Make sense of problems and persevere in solving them. *
 - 2) Reason abstractly and quantitatively. *
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 - 4) Model with mathematics. *
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 - 6) Attend to precision. *
 - 7) Look for and make use of structure. *
 - 8) Look for and express regularity in repeated reasoning. *

Potential Parent Support
 Best use of time for this chapter is to practice multiplying two-digit numbers by two-digit numbers. Here is a great source <http://www.superteacherworksheets.com/multiplication2.html>.

4th Grade - Chapter 6 - Divide by a One-Digit Number

Numbers and Operations in Base Ten

15 days

January 5 to January 23

January 5 WORK DAY	January 6 Am I Ready? Video Introduction My Math Words Foldables Activity <i>Pg 321-328</i>	January 7 Lesson 1 Divide Multiples of 10, 100 and 1000 <i>Pg 329-334</i>	January 8 Lesson 2 Estimate Quotients <i>Pg 335-340</i>	January 9 Lesson 3 Hands On: Use Place Value to Divide <i>Pg 341-346</i>
January 12 Lesson 4 Problem Solving: Make a Model <i>Pg 347-352</i>	January 13 Lesson 5 Divide with Remainders <i>Pg 353-358</i>	January 14 Lesson 6 Interpret Remainders <i>Pg 359-364</i>	January 15 Check My Progress Lesson 7 Place the First Digit <i>Pg 365-372</i>	January 16 Lesson 8 Hands On: Distributive Property and Partial Quotients <i>Pg 373-378</i>
January 19 HOLIDAY	January 20 Lesson 9 Divide Greater Numbers <i>Pg 379-384</i>	January 21 Check My Progress Lesson 10 Quotients with Zeros <i>Pg 385-392</i>	January 22 Lesson 11 Solve Multi-Step Word Problems <i>Pg 393-398</i>	January 23 Review and Reflect <i>Pg 399-404</i> CA-4-6

Common Core State Standards

Operations and Algebraic Thinking
Use the four operations with whole numbers to solve problems.

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

Gain familiarity with factors and multiples.

4. 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.

Number and Operations in Base Ten
Generalize place value understanding for multi-digit whole numbers.

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.

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

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

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.

Chapter 6 - Vocabulary

compatible numbers
remainder
partial quotients

What Students Should Be Able To Do

- ☆Use basic facts and patterns to divide mentally.
- ☆Estimate quotients, using compatible numbers, basic facts and place value.
- ☆Use place value and models to explore dividing by one-digit numbers.
- ☆Divide with remainders and check using multiplication and addition.
- ☆Interpret what the remainder means in the context of a division problem.
- ☆Determine where to place the first digit when dividing.
- ☆Use the Distributive Property and partial quotients to divide.
- ☆Solve division problems that result in quotients that have zeros.
- ☆Solve multi-step word problems using more than one operation.

IXL Alignment

4TH GRADE
E.1, E.2, E.3, E.4, E.5, E.6, E.7, E.8, E.9, E.10, E.11, E.12

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically. *
- 6) Attend to precision. *
- 7) Look for and make use of structure.
- 8) Look for and express regularity in repeated reasoning.

Potential Parent Support
Purchase flash cards and practice basic multiplication and division facts. Digital flashcards are available at <http://www.factmonster.com/math/flashcards.html>. **Division facts need to be memorized by the end of 5th grade.**

4th Grade - Chapter 7 - Patterns and Sequences

Operations and Algebraic Thinking

15 days

January 26 to February 13

January 26 Catch Up Day	January 27 Am I Ready? Video Introduction My Math Words Foldables Activity <i>Pg 405-412</i>	January 28 Lesson 1 Nonnumeric Patterns <i>Pg 413-418</i>	January 29 Lesson 2 Numeric Patterns <i>Pg 419-424</i>	January 30 Lesson 3 Sequences <i>Pg 425-430</i>
February 2 Lesson 4 Problem Solving: Look for a Pattern <i>(Skip if needed)</i> <i>Pg 431-436</i>	February 3 Check My Progress Lesson 5 Addition and Subtraction Rules <i>Pg 437-444</i>	February 4 Lesson 6 Multiplication and Division Rules <i>Pg 445-450</i>	February 5 Lesson 7 Order of Operations <i>Pg 451-456</i>	February 6 Check My Progress Lesson 8 Hands On: Equations with Two Operations <i>Pg 457-464</i>
February 9 Lesson 9 Equations with Multiple Operations <i>Pg 465-470</i>	February 10 Review and Reflect <i>Pg 471-476</i>	February 11 CA-4-7	February 12 Performance Task 1 TBD <i>*Lesson Plan, Task & Rubric are on the wiki</i>	February 13 Performance Task 1 TBD <i>*Lesson Plan, Task & Rubric are on the wiki</i>

Common Core State Standards

Operations and Algebraic Thinking
Use the four operations with whole numbers to solve problems.
 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.

Generate and analyze patterns.
 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.

Chapter 7 - Vocabulary

pattern
 nonnumeric patterns
 numeric patterns
 rule
 term
 sequence
 input
 output

What Students Should Be Able To Do

- ☆Describe nonnumeric growing and repeating patterns.
- ☆Identify, describe and extend numeric patterns.
- ☆Extend patterns and write observations about the pattern.
- ☆Find and use rules to write addition and subtraction equations.
- ☆Find and use rules to write multiplication and division equations.
- ☆Use order of operations to solve problems.
- ☆Explore equations with two operations.
- ☆Use tables to recognize and write equations with two operations.

IXL Alignment

4TH GRADE
 H.1, H.2, L.1, L.2, L.3, L.4, L.5

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically. *
- 6) Attend to precision. *
- 7) Look for and make use of structure.
- 8) Look for and express regularity in repeated reasoning. *

Potential Parent Support
 Practice count-by's or count on's. Count by 1's to 10, count by 2's to 20, count by 3's to 30 and so on. This is a great activity for working with a partner and going back and forth.

4th Grade - Chapter 8 - Fractions

Numbers and Operations - Fractions

15 days

February 16 to March 6

February 16 HOLIDAY	February 17 Am I Ready? Video Introduction My Math Words Foldables Activity <i>Pg 475-484</i>	February 18 Lesson 1 Factors and Multiples <i>Pg 485-490</i>	February 19 Lesson 2 Prime and Composite Numbers <i>Pg 491-496</i>	February 20 Check My Progress Lesson 3 Hands On: Model Equivalent Fractions <i>Pg 497-504</i>
February 23 Lesson 4 Equivalent Fractions <i>Pg 505-510</i>	February 24 Lesson 5 Simplest Form <i>Pg 511-516</i>	February 25 Lesson 6 Compare and Order Fractions <i>Pg 517-522</i>	February 26 Lesson 7 Use Benchmark Fractions to Compare and Order <i>Pg 523-528</i>	February 27 Check My Progress Lesson 9 Mixed Numbers <i>Pg 529-542</i>
March 2 Lesson 10 Mixed Numbers & Improper Fractions <i>Pg 543-548</i>	March 3 Review and Reflect <i>Pg 549-552</i> CA-4-8	March 4 GRADING DAY	March 5 CONFERENCES	March 6 CONFERENCES

Common Core State Standards

Operations and Algebraic Thinking

Gain familiarity with factors and multiples.

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.

Number and Operations—Fractions

Extend understanding of fraction equivalence and ordering.

1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.
b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.

Understand decimal notation for fractions, and compare decimal fractions.

5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.

IXL Alignment

4TH GRADE

A.5, Q.1, Q.2, Q.3, Q.4, Q.5, Q.6, Q.7, Q.8, Q.9, Q.10

Chapter 8 - Vocabulary

factor pairs
prime number
composite number
numerator
denominator
equivalent fractions
simplest form
greatest common factor
least common multiple
benchmark
fractions
mixed number
improper fraction

What Students Should Be Able To Do

- ☆ Find factors and multiples of whole numbers.
- ☆ Determine if a number is prime or composite.
- ☆ Explore and find equivalent fractions.
- ☆ Write a fraction in simplest form.
- ☆ Compare and order fractions.
- ☆ Use benchmark fractions to compare and order numbers.
- ☆ Represent mixed numbers by decomposing them into a sum of whole numbers and unit fractions.
- ☆ Write mixed numbers and improper fractions.

Standards for Mathematical Practice

- 1) Make sense of problems and persevere in solving them. *
- 2) Reason abstractly and quantitatively. *
- 3) Construct viable arguments and critique the reasoning of others. *
- 4) Model with mathematics. *
- 5) Use appropriate tools strategically.
- 6) Attend to precision. *
- 7) Look for and make use of structure. *
- 8) Look for and express regularity in repeated reasoning. *

Potential Parent Support

Roll two dice and create a fraction. For example I roll a 2 and 4. I can create two-fourths which reduces to one-half or I can create four-halves which reduces to 2. This is great for students to gain an understanding of benchmark fractions.

4th Grade - Chapter 9 - Operations with Fractions

Numbers and Operations - Fractions

10 days

March 10 to March 21

<p>March 9 Am I Ready? Video Introduction My Math Words Foldables Activity Pg 553-560</p>	<p>March 10 Lesson 1 Hands On: Use Models to Add Like Fractions Pg 561-566</p>	<p>March 11 Lesson 2 Add Like Fractions Pg 567-572</p>	<p>March 12 Lesson 3 Hands On: Use Models to Subtract Like Fractions Pg 573-578</p>	<p>March 13 Lesson 4 Subtract Like Fractions Pg 579-584</p>
<p>March 16 Check My Progress Lesson 6 Add Mixed Numbers Pg 585-586 & 593-598</p>	<p>March 17 Lesson 7 Subtract Mixed Numbers Pg 599-604</p>	<p>March 18 Check My Progress Lesson 8 Hands On: Model Fractions and Multiplication Pg 605-612</p>	<p>March 19 Lesson 9 Multiply Fractions by Whole Numbers Pg 613-618</p>	<p>March 20 Review and Reflect Pg 619-622 CA-4-9</p>

Common Core State Standards

Number and Operations—Fractions
Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.

a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.

c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

a. Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.

b. Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)

c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

Chapter 9 - Vocabulary

like fractions

- What Students Should Be Able To Do**
- ☆Add like fractions using models.
 - ☆Subtract like fractions using models.
 - ☆Add and subtract mixed numbers.
 - ☆Use models to multiply fractions.
 - ☆Multiply fractions by whole numbers.

IXL Alignment

4TH GRADE
R.1, R.2, R.3, R.4, R.5, R.6, R.7, R.8, R.9, R.10, R.11, R.12, R.13, R.14, S.1, S.2, S.3

- Standards for Mathematical Practice**
- 1) Make sense of problems and persevere in solving them. *
 - 2) Reason abstractly and quantitatively. *
 - 3) Construct viable arguments and critique the reasoning of others. *
 - 4) Model with mathematics. *
 - 5) Use appropriate tools strategically. *
 - 6) Attend to precision. *
 - 7) Look for and make use of structure. *
 - 8) Look for and express regularity in repeated reasoning.

Potential Parent Support
Practice count-by's again but this time with fractions. Count by halves for example. $1/2, 1, 1 \frac{1}{2}, 2, 2 \frac{1}{2}, 3$, etc. This helps with basic fraction understanding.