



# IXL Skill Alignment

4th alignment for GO Math! 2015 Common Core Edition

This document includes the IXL skill alignments to Houghton Mifflin Harcourt's *GO Math! 2015 Common Core Edition*. IXL provides skill alignments as a service to teachers, students, and parents. The following skill alignments are not affiliated with, sponsored by, or endorsed by the publisher of the referenced textbook. IXL and IXL Learning are registered trademarks of IXL Learning, Inc. All other trademarks and registered trademarks are the property of their respective owners.

# Chapter 1

## Place Value, Addition, and Subtraction to One Million

Textbook section	IXL skills
<b>1.1:</b> Model Place Value Relationships	<b>A.1</b> Value of a digit >>  <i>See also:</i> <b>A.3</b> Place value names >>
<b>1.2:</b> Read and Write Numbers	<b>A.2</b> Convert between standard and expanded form >>  <b>A.5</b> Choose word names for numbers up to one thousand >>  <b>A.6</b> Write word names for numbers up to one thousand >>  <b>A.10</b> Write word names for numbers up to one million >>  <i>See also:</i> <b>A.9</b> Choose word names for numbers up to one million >>
<b>1.3:</b> Compare and Order Numbers	<b>A.21</b> Compare numbers up to one billion >>
<b>1.4:</b> Round Numbers	
<b>1.5:</b> Rename Numbers	<b>A.4</b> Convert between place values >>
<b>1.6:</b> Add Whole Numbers	
<b>1.7:</b> Subtract Whole Numbers	<b>C.8</b> Estimate differences >> <b>C.9</b> Estimate differences: word problems >>
<b>1.8:</b> Problem Solving - Comparison Problems with Addition and Subtraction	

# Chapter 2

## Multiply by 1-Digit Numbers

Textbook section	IXL skills
<b>2.1:</b> Multiplication Comparisons	
<b>2.2:</b> Comparison Problems	
<b>2.3:</b> Multiply Tens, Hundreds, and Thousands	
<b>2.4:</b> Estimate Products	<b>D.13</b> Estimate products - multiply by 1-digit numbers >>
<b>2.5:</b> Multiply Using the Distributive Property	
<b>2.6:</b> Multiply Using Expanded Form	<b>D.11</b> Distributive property: find the missing factor >>
<b>2.7:</b> Multiply Using Partial Products	
<b>2.8:</b> Multiply Using Mental Math	
<b>2.9:</b> Problem Solving - Multistep Multiplication Problems	<b>D.28</b> Multiply three or more numbers: word problems >>
<b>2.10:</b> Multiply 2-Digit Numbers with Regrouping	<b>D.6</b> Multiply 1-digit numbers by 2-digit numbers >>  <i>See also:</i> <b>D.30</b> Multiplication input/output tables >> <b>D.31</b> Multiplication input/output tables: find the rule >>
<b>2.11:</b> Multiply 3-Digit and 4-Digit Numbers with Regrouping	<b>D.7</b> Multiply 1-digit numbers by 3-digit or 4-digit numbers >>
<b>2.12:</b> Solve Multistep Problems Using Equations	

# Chapter 3

## Multiply 2-Digit Numbers

Textbook section	IXL skills
3.1: Multiply by Tens	
3.2: Estimate Products	
3.3: Area Models and Partial Products	
3.4: Multiply Using Partial Products	
3.5: Multiply with Regrouping	<b>D.19</b> Multiply a 2-digit number by a 2-digit number >> <b>D.20</b> Multiply a 2-digit number by a 2-digit number: word problems >>  <i>See also:</i> <b>D.18</b> Multiply a 2-digit number by a 2-digit number: complete the missing steps >>
3.6: Choose a Multiplication Method	<b>D.19</b> Multiply a 2-digit number by a 2-digit number >> <b>D.20</b> Multiply a 2-digit number by a 2-digit number: word problems >>
3.7: Problem Solving - Multiply 2-Digit Numbers	

# Chapter 4

## Divide by 1-Digit Numbers

Textbook section	IXL skills
<b>4.1:</b> Estimate Quotients Using Multiples	
<b>4.2:</b> Remainders	
<b>4.3:</b> Interpret the Remainder	<b>E.5</b> Divide 2-digit numbers by 1-digit numbers: word problems >> <b>E.7</b> Divide 2-digit numbers by 1-digit numbers: interpret remainders >>
<b>4.4:</b> Divide Tens, Hundreds, and Thousands	
<b>4.5:</b> Estimate Quotients Using Compatible Numbers	
<b>4.6:</b> Division and the Distributive Property	
<b>4.7:</b> Divide Using Repeated Subtraction	
<b>4.8:</b> Divide Using Partial Quotients	
<b>4.9:</b> Model Division with Regrouping	
<b>4.10:</b> Place the First Digit	
<b>4.11:</b> Divide by 1-Digit Numbers	<b>E.8</b> Divide larger numbers by 1-digit numbers >> <b>E.9</b> Divide larger numbers by 1-digit numbers: word problems >>
<b>4.12:</b> Problem Solving - Multistep Division Problems	<b>F.6</b> Multi-step word problems >>

# Chapter 5

## Factors, Multiples, and Patterns

Textbook section	IXL skills	
5.1: Model Factors		
5.2: Factors and Divisibility	D.5	Identify factors >>
5.3: Problem Solving - Common Factors		
5.4: Factors and Multiples	D.4	Choose the multiples of a given number up to 12 >>
	D.5	Identify factors >>
5.5: Prime and Composite Numbers	A.14	Prime and composite - up to 20 >>
5.6: Number Patterns	L.7	Use a rule to complete a number pattern >>
	<i>See also:</i>	
	L.8	Number patterns: word problems >>
	L.9	Number patterns: mixed review >>

# Chapter 6

## Fraction Equivalence and Comparison

Textbook section	IXL skills
<b>6.1:</b> Equivalent Fractions	<b>P.5</b> Find equivalent fractions using area models >>
<b>6.2:</b> Generate Equivalent Fractions	<b>P.7</b> Equivalent fractions >>  <i>See also:</i> <b>P.9</b> Patterns of equivalent fractions >>
<b>6.3:</b> Simplest Form	<b>P.10</b> Write fractions in lowest terms >>
<b>6.4:</b> Common Denominators	
<b>6.5:</b> Problem Solving - Find Equivalent Fractions	
<b>6.6:</b> Compare Fractions Using Benchmarks	<b>P.16</b> Compare fractions using benchmarks >>  <i>See also:</i> <b>P.15</b> Benchmark fractions >>
<b>6.7:</b> Compare Fractions	<b>P.13</b> Compare fractions with like numerators or denominators >> <b>P.17</b> Compare fractions >> <b>P.18</b> Compare fractions in recipes >>  <i>See also:</i> <b>P.11</b> Compare fractions with like numerators or denominators using models >> <b>P.14</b> Compare fractions using models >>
<b>6.8:</b> Compare and Order Fractions	<b>P.19</b> Graph and order fractions on number lines >> <b>P.20</b> Order fractions with like numerators or denominators >> <b>P.21</b> Order fractions >>

# Chapter 7

## Add and Subtract Fractions

Textbook section	IXL skills
<b>7.1:</b> Add and Subtract Parts of a Whole	
<b>7.2:</b> Write Fractions as Sums	<b>Q.1</b> Decompose fractions into unit fractions >> <b>Q.2</b> Decompose fractions >> <b>Q.3</b> Decompose fractions multiple ways >>
<b>7.3:</b> Add Fractions Using Models	
<b>7.4:</b> Subtract Fractions Using Models	
<b>7.5:</b> Add and Subtract Fractions	<b>Q.5</b> Add fractions with like denominators >> <b>Q.7</b> Subtract fractions with like denominators >> <b>Q.9</b> Add and subtract fractions with like denominators >> <b>Q.11</b> Add and subtract fractions with like denominators: word problems >>  <i>See also:</i> <b>Q.12</b> Add and subtract fractions with like denominators in recipes >>
<b>7.6:</b> Rename Fractions and Mixed Numbers	<b>P.23</b> Convert between improper fractions and mixed numbers >>
<b>7.7:</b> Add and Subtract Mixed Numbers	
<b>7.8:</b> Subtraction with Renaming	<b>Q.14</b> Add and subtract mixed numbers with like denominators >>
<b>7.9:</b> Fractions and Properties of Addition	
<b>7.10:</b> Problem Solving: Multistep Fraction Problems	



# Chapter 8

## Multiply Fractions by Whole Numbers

Textbook section	IXL skills
<b>8.1:</b> Multiples of Unit Fractions	<b>S.1</b> Multiply unit fractions by whole numbers using number lines >>
	<b>S.2</b> Multiply unit fractions by whole numbers using models >>
	<b>S.5</b> Multiply unit fractions by whole numbers >>
	<i>See also:</i> <b>S.3</b> Multiples of fractions >>
<b>8.2:</b> Multiples of Fractions	<b>S.3</b> Multiples of fractions >>
	<b>S.7</b> Multiply fractions by whole numbers using number lines >>
<b>8.3:</b> Multiply a Fraction by a Whole Number Using Models	<b>S.2</b> Multiply unit fractions by whole numbers using models >>
	<b>S.8</b> Multiply fractions by whole numbers using models >>
<b>8.4:</b> Multiply a Fraction or Mixed Number by a Whole Number	<b>S.5</b> Multiply unit fractions by whole numbers >>
	<b>S.10</b> Multiply fractions by whole numbers >>
	<b>S.12</b> Multiply fractions by whole numbers: word problems >>
	<b>S.13</b> Multiply fractions and mixed numbers by whole numbers in recipes >>
<b>8.5:</b> Problem Solving: Comparison Problems with Fractions	<b>S.6</b> Multiply unit fractions by whole numbers: word problems >>
	<b>S.12</b> Multiply fractions by whole numbers: word problems >>

# Chapter 9

## Relate Fractions and Decimals

Textbook section	IXL skills
<b>9.1:</b> Relate Tenths and Decimals	
<b>9.2:</b> Relate Hundredths and Decimals	<b>T.1</b> What decimal number is illustrated? >> <b>T.2</b> Model decimals and fractions >> <b>T.9</b> Convert fractions and mixed numbers to decimals - denominators of 10 and 100 >>  <i>See also:</i> <b>T.7</b> Decimal number lines >> <b>T.8</b> Graph fractions as decimals on number lines >>
<b>9.3:</b> Equivalent Fractions and Decimals	<b>T.5</b> Equivalent decimals >> <b>T.9</b> Convert fractions and mixed numbers to decimals - denominators of 10 and 100 >>
<b>9.4:</b> Relate Fractions, Decimals, and Money	<b>M.1</b> Count coins and bills - up to \$5 bill >>
<b>9.5:</b> Problem Solving: Money	<b>M.6</b> Making change >>
<b>9.6:</b> Add Fractional Parts of 10 and 100	<b>R.5</b> Add fractions with denominators of 10 and 100 >>
<b>9.7:</b> Compare Decimals	<b>T.14</b> Compare decimals on number lines >>  <i>See also:</i> <b>T.18</b> Compare decimals and fractions on number lines >>

# Chapter 10

## Two Dimensional Figures

Textbook section	IXL skills
<b>10.1:</b> Lines, Rays, and Angles	<b>W.4</b> Lines, line segments, and rays >> <b>Z.1</b> Acute, right, obtuse, and straight angles >>
<b>10.2:</b> Classify Triangles by Angles	<b>X.1</b> Acute, obtuse, and right triangles >>
<b>10.3:</b> Parallel Lines and Perpendicular Lines	<b>W.5</b> Parallel, perpendicular, and intersecting lines >>
<b>10.4:</b> Classify Quadrilaterals	<b>X.4</b> Parallel sides in quadrilaterals >> <b>X.5</b> Identify parallelograms >> <b>X.6</b> Identify trapezoids >> <b>X.7</b> Identify rectangles >> <b>X.8</b> Identify rhombuses >> <b>X.9</b> Classify quadrilaterals >>
<b>10.5:</b> Line Symmetry	<b>Y.1</b> Identify lines of symmetry >>
<b>10.6:</b> Find and Draw Lines of Symmetry	<b>Y.2</b> Draw lines of symmetry >> <b>Y.3</b> Count lines of symmetry >>
<b>10.7:</b> Problem Solving: Shape Patterns	<b>L.1</b> Find the next shape in a repeating pattern >> <b>L.2</b> Complete a repeating pattern >> <b>L.3</b> Make a repeating pattern >> <b>L.4</b> Find the next row in a growing pattern of shapes >>

# Chapter 11

## Angles

Textbook section	IXL skills
<b>11.1:</b> Angles and Fractional Parts of a Circle	
<b>11.2:</b> Degrees	<b>Z.1</b> Acute, right, obtuse, and straight angles >> <b>Z.2</b> Angles of 90, 180, 270, and 360 degrees >>
<b>11.3:</b> Measure and Draw Angles	<b>Z.3</b> Measure angles with a protractor >>
<b>11.4:</b> Join and Separate Angles	<b>Z.5</b> Adjacent angles >>
<b>11.5:</b> Problem Solving: Unknown Angles	

# Chapter 12

## Relative Size of Measurement Units

Textbook section	IXL skills
<b>12.1:</b> Measurement Benchmarks	<b>N.2</b> Which customary unit is appropriate? >> <b>N.11</b> Which metric unit is appropriate? >>
<b>12.2:</b> Customary Units of Length	<b>N.3</b> Compare and convert customary units of length >>
<b>12.3:</b> Customary Units of Weight	<b>N.4</b> Compare and convert customary units of weight >>
<b>12.4:</b> Customary Units of Liquid Volume	<b>N.5</b> Compare and convert customary units of volume >>  <i>See also:</i> <b>N.6</b> Compare and convert customary units >> <b>N.7</b> Conversion tables - customary units >>
<b>12.5:</b> Line Plots	<b>J.8</b> Create and interpret line plots with fractions >>  <i>See also:</i> <b>J.6</b> Interpret line plots >> <b>J.7</b> Create line plots >>
<b>12.6:</b> Metric Units of Length	<b>N.12</b> Compare and convert metric units of length >>
<b>12.7:</b> Metric Units of Mass and Liquid Volume	<b>N.13</b> Compare and convert metric units of weight >> <b>N.14</b> Compare and convert metric units of volume >>  <i>See also:</i> <b>N.15</b> Compare and convert metric units >> <b>N.16</b> Conversion tables - metric units >>
<b>12.8:</b> Units of Time	
<b>12.9:</b> Problem Solving: Elapsed Time	<b>O.5</b> Elapsed time >> <b>O.6</b> Elapsed time: word problems >>

**12.10: Mixed Measures****N.9** Convert mixed customary units >>**N.10** Add and subtract mixed customary units >>**O.1** Convert time units >>**O.2** Add and subtract mixed time units >>

---

**12.11: Patterns in Measurement Units**

---

# Chapter 13

## Algebra: Perimeter and Area

Textbook section	IXL skills
<b>13.1:</b> Perimeter	
<b>13.2:</b> Area	<b>BB.11</b> Area and perimeter: word problems >>  <i>See also:</i> <b>BB.6</b> Find the area or missing side length of a rectangle >>
<b>13.3:</b> Area of Combined Rectangles	<b>BB.7</b> Area of complex figures (with all right angles) >>
<b>13.4:</b> Find Unknown Measures	<b>BB.2</b> Perimeter: find the missing side lengths >> <b>BB.6</b> Find the area or missing side length of a rectangle >> <b>BB.11</b> Area and perimeter: word problems >>
<b>13.5:</b> Problem Solving: Find the Area	<b>BB.8</b> Area between two rectangles >>