



IXL Skill Alignment

5th grade alignment for Math in Focus (2013)



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Chapter 1

Whole Numbers

Textbook section	IXL skills
1.1: Numbers to 10,000,000	<ol style="list-style-type: none">1. Writing numbers in words to millions: convert words to digits 9P52. Writing numbers in words to millions: convert digits to words 62R <p><i>Also consider</i></p> <ul style="list-style-type: none">• Spell word names for numbers up to one million ZEC
1.2: Place Value	<ol style="list-style-type: none">1. Value of a digit U522. Identify place value names AJY3. Convert between standard and expanded form: up to millions EWK <p><i>Also consider</i></p> <ul style="list-style-type: none">• Place value 83P
1.3: Comparing Numbers to 10,000,000	<ol style="list-style-type: none">1. Compare numbers up to billions CLB2. Put numbers in order AET
1.4: Rounding and Estimating	<ol style="list-style-type: none">1. Round using a number line ARL2. Estimate sums and differences of whole numbers 9RM3. Estimate products and quotients of whole numbers ZXI

Chapter 2

Whole Number Multiplication and Division

Textbook section	IXL skills
2.1: Using a Calculator	1. Add, subtract, multiply, and divide whole numbers WEX
2.2: Multiplying by Tens, Hundreds, or Thousands	1. Multiplication patterns over increasing place values 5N8 2. Multiply numbers ending in zeroes 8WG <i>Also consider</i> <ul style="list-style-type: none"> Multiply by 10 or 100 NP2 Estimate products: word problems GVG
2.3: Multiplying by Powers of Ten	1. Understanding exponents: powers of 10 64W 2. Multiply a whole number by a power of ten: with exponents YJD
2.4: Multiplying by 2-Digit Numbers	1. Multiply by 2-digit numbers 9X5 <i>Also consider</i> <ul style="list-style-type: none"> Multiply by 2-digit numbers: complete the missing steps 9LX
2.5: Dividing by Tens, Hundreds, or Thousands	1. Division patterns over increasing place values V52 2. Divide by numbers ending in zeroes 9YJ <i>Also consider</i> <ul style="list-style-type: none"> Estimate quotients: 2-digit divisors EFW
2.6: Dividing by 2-Digit Numbers	1. Divide 2-digit and 3-digit numbers by 2-digit numbers HMA 2. Divide 4-digit numbers by 2-digit numbers 35K <i>Also consider</i> <ul style="list-style-type: none"> Adjust quotients 5FH

2.7: Order of Operations

1. Evaluate numerical expressions Z5N
2. Evaluate numerical expressions with parentheses and brackets TVY

Also consider

- Evaluate numerical expressions with parentheses in different places 9F5

2.8: Real-World Problems: Multiplication and Division

1. Multi-step word problems Z76
2. Multi-step word problems involving remainders XGE

Also consider

- Multi-step word problems: identify reasonable answers NNJ

Chapter 3

Fractions and Mixed Numbers

Textbook section	IXL skills
3.1: Adding Unlike Fractions	1. Add two or three fractions with unlike denominators 8L4 <i>Also consider</i> <ul style="list-style-type: none"> Add fractions with unlike denominators using models YKV Add fractions with unlike denominators using objects KNQ
3.2: Subtracting Unlike Fractions	1. Subtract fractions with unlike denominators KU6 2. Estimate sums and differences of fractions using benchmarks 9JR <i>Also consider</i> <ul style="list-style-type: none"> Subtract fractions with unlike denominators using models U6X Subtract fractions with unlike denominators using objects YT7
3.3: Fractions, Mixed Numbers, and Division Expressions	1. Understand fractions as division: word problems CTD 2. Relate division and fractions Z8U <i>Also consider</i> <ul style="list-style-type: none"> Convert between improper fractions and mixed numbers B7X
3.4: Expressing Fractions, Division Expressions, and Mixed Numbers as Decimals	1. Convert fractions to decimals WLD <i>Also consider</i> <ul style="list-style-type: none"> Model decimals and fractions ZKL
3.5: Adding Mixed Numbers	1. Add mixed numbers with unlike denominators 39G

3.6: Subtracting Mixed Numbers

1. Subtract mixed numbers with unlike denominators: with renaming QK5
2. Estimate sums and differences of mixed numbers HUJ

Also consider

- Inequalities with addition and subtraction of mixed numbers 9GK

3.7: Real-World Problems: Fractions and Mixed Numbers

1. Add and subtract mixed numbers: word problems 9XV

Also consider

- Add and subtract fractions in recipes WTW

Chapter 4

Multiplying and Dividing Fractions and Mixed Numbers

Textbook section	IXL skills
4.1: Multiplying Proper Fractions	<ol style="list-style-type: none"> 1. Multiply two fractions using models XN6 2. Multiply two fractions 6LY
4.2: Real-World Problems: Multiplying Proper Fractions	<ol style="list-style-type: none"> 1. Multiply two fractions: word problems STN
4.3: Multiplying Improper Fractions by Fractions	<ul style="list-style-type: none"> • <i>Coming soon:</i> Multiply improper fractions
4.4: Multiplying Mixed Numbers and Whole Numbers	<ol style="list-style-type: none"> 1. Multiply a mixed number by a whole number LWU
4.5: Real-World Problems: Multiplying with Mixed Numbers	<ol style="list-style-type: none"> 1. Multiply mixed numbers by whole numbers: word problems ZUA
4.6: Dividing Fractions and Whole Numbers	<ol style="list-style-type: none"> 1. Divide fractions by whole numbers LMW 2. Divide whole numbers by unit fractions using area models JYS 3. Divide whole numbers by unit fractions 3L9 <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Divide unit fractions by whole numbers using models XML • Divide unit fractions by whole numbers GXY • Divide whole numbers by unit fractions using models VDU
4.7: Real-World Problems: Multiplying and Dividing with Fractions	<ol style="list-style-type: none"> 1. Divide unit fractions and whole numbers: word problems G2N 2. Add, subtract, multiply, and divide fractions: word problems LCU

Chapter 5

Algebra

Textbook section	IXL skills
5.1: Number Patterns and Relationships	<ol style="list-style-type: none">1. Compare patterns XPM2. Number sequences: mixed review GM2 <p><i>Also consider</i></p> <ul style="list-style-type: none">• Number sequences: word problems R6C• Shape patterns 9DE
5.2: Using Letters as Numbers	<ol style="list-style-type: none">1. Write variable expressions UZZ2. Write variable expressions: word problems E2M3. Evaluate variable expressions CTJ
5.3: Simplifying Algebraic Expressions	<ol style="list-style-type: none">1. Add and subtract like terms BNA
5.4: Inequalities and Equations	<ol style="list-style-type: none">1. Does x satisfy an equation? P652. Solve equations with whole numbers 8PA
5.5: Real-World Problems: Algebra	<ol style="list-style-type: none">1. Write variable equations: word problems TVB2. Solve one-step equations: word problems H7J

Chapter 6

Area

Textbook section	IXL skills
6.1: Finding the Area of a Rectangle with Fractional Side Lengths	<ol style="list-style-type: none">1. Multiply fractions to find area SEZ2. Area of squares and rectangles with fractions PMV
6.2: Base and Height of a Triangle	
6.3: Finding the Area of a Triangle	<ol style="list-style-type: none">1. Area of triangles QJT

Chapter 7

Ratio

Textbook section	IXL skills
7.1: Finding Ratio	1. Write a ratio GF8
7.2: Equivalent Ratios	1. Identify equivalent ratios TSH 2. Write an equivalent ratio TSU
7.3: Real-World Problems: Ratios	1. Write a ratio: word problems GC7 <i>Also consider</i> <ul style="list-style-type: none">• Equivalent ratios: word problems SDT
7.4: Ratios in Fraction Form	1. Write a ratio using a fraction 7F5 2. Write a ratio using a fraction: word problems DQV
7.5: Comparing Three Quantities	
7.6: Real-World Problems: More Ratios	1. Equivalent fractions: word problems 84W

Chapter 8

Decimals

Textbook section	IXL skills
8.1: Understanding Thousandths	<ol style="list-style-type: none">1. Convert fractions and mixed numbers to decimals WKQ2. Convert decimals between standard and expanded form using fractions BLQ <p><i>Also consider</i></p> <ul style="list-style-type: none">• Identify place values in decimal numbers 5N5
8.2: Comparing and Rounding Decimals	<ol style="list-style-type: none">1. Compare decimal numbers NSG2. Put decimal numbers in order YUX3. Round decimals MPB <p><i>Also consider</i></p> <ul style="list-style-type: none">• Compare, order, and round decimals: word problems 2MV
8.3: Rewriting Decimals as Fractions and Mixed Numbers	<ol style="list-style-type: none">1. Convert decimals to fractions MN52. Convert decimals to mixed numbers TBV <p><i>Also consider</i></p> <ul style="list-style-type: none">• Model decimals and fractions ZKL

Chapter 9

Multiplying and Dividing Decimals

Textbook section	IXL skills
9.1: Multiplying Decimals	1. Multiply a decimal by a one-digit whole number XNY <i>Also consider</i> <ul style="list-style-type: none"> Multiply a decimal by a one-digit whole number using blocks U5Q
9.2: Multiplying by Tens, Hundreds, or Thousands	1. Multiply a decimal by a power of ten 5DK 2. Multiply by a power of ten with decimals: find the missing number GC5 3. Multiply a decimal by a power of ten: with exponents 28A
9.3: Dividing Decimals	1. Divide decimals by one-digit whole numbers MTQ 2. Division with decimal quotients and rounding UTF <i>Also consider</i> <ul style="list-style-type: none"> Divide decimals by one-digit whole numbers: word problems D66 Divide money amounts: word problems 2RU
9.4: Dividing by Tens, Hundreds, or Thousands	1. Divide by powers of ten H2N 2. Divide by a power of ten with decimals: find the missing number R2P <i>Also consider</i> <ul style="list-style-type: none"> Decimal division patterns over increasing place values GBS
9.5: Estimating Decimals	1. Estimate sums and differences of decimals using rounding Y8R 2. Estimate products of whole numbers and decimals Q6D 3. Estimate decimal quotients CZ9

Also consider

- Estimate sums and differences of decimals using benchmarks CHE

9.6: Converting Metric Units

1. Convert metric units involving decimals 2Q8
2. Convert metric mixed units LCG
3. Multi-step problems with metric unit conversions X5T

Also consider

- Convert metric units of length, mass, and capacity VQP

9.7: Real-World Problems: Decimals

1. Add, subtract, multiply, and divide decimals: word problems 7SX
2. Multiply and divide decimal money amounts: word problems 5WW

Chapter 10

Percent

Textbook section	IXL skills
10.1: Percent	<ol style="list-style-type: none">1. What percentage is illustrated? DSJ2. Convert between percents, fractions, and decimals: denominators of 10 or 100 66Q
10.2: Expressing Fractions as Percents	<ol style="list-style-type: none">1. Convert fractions to percents using grid models RPT2. Convert between percents, fractions, and decimals 2VM <p><i>Also consider</i></p> <ul style="list-style-type: none">• Find what percent one number is of another: word problems J6P
10.3: Percent of a Number	<ol style="list-style-type: none">1. Percent of a number 68S2. Percent of a number: word problems XTQ <p><i>Also consider</i></p> <ul style="list-style-type: none">• Compare percentages 65A
10.4: Real-World Problems: Percent	<ol style="list-style-type: none">1. Sale prices CE82. Percents: calculate tax, tip, and more U7J

Chapter 11

Graphs and Probability

Textbook section	IXL skills
11.1: Making and Interpreting Line Plots	<ol style="list-style-type: none"> 1. Create line plots ZBV 2. Interpret line plots 79C 3. Create and interpret line plots with fractions XBS
11.2: Making and Interpreting Double Bar Graphs	<ol style="list-style-type: none"> 1. Complete double bar graphs 8GE 2. Interpret double bar graphs 6VC <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Create bar graphs A9F • Interpret bar graphs YW8 • Interpret bar graphs: multi-step problems DGY
11.3: Graphing an Equation	<ol style="list-style-type: none"> 1. Objects on a coordinate plane NTR 2. Graph points on a coordinate plane AST 3. Interpret a graph: word problems AVP <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Describe the coordinate plane PF8 • Graph points from a table HWV • Graph a two-variable relationship QEH
11.4: Comparing Data Using Line Graphs	<ol style="list-style-type: none"> 1. Graph patterns using rules PN2 2. Compare patterns XPM
11.5: Combinations	<ol style="list-style-type: none"> 1. Combinations XNM
11.6: Theoretical Probability and Experimental Probability	<ol style="list-style-type: none"> 1. Find the probability C79 2. Probabilities of compound events 58S 3. Experimental probability HFT <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Understanding probability RKS

Chapter 12

Angles

Textbook section	IXL skills
12.1: Angles on a Line	<ol style="list-style-type: none">Angles that form a line: find the missing measure LV9 <p><i>Also consider</i></p> <ul style="list-style-type: none">Measure angles with a protractor GSJ
12.2: Angles at a Point	<ol style="list-style-type: none">Missing angles in circles 7AP <p><i>Also consider</i></p> <ul style="list-style-type: none">Angles of 90, 180, 270, and 360 degrees ULP
12.3: Vertical Angles	<ol style="list-style-type: none">Identify vertical angles JDZFind measures of complementary, supplementary, vertical, and adjacent angles 2VU

Chapter 13

Properties of Triangles

Textbook section	IXL skills
13.1: Classifying Triangles	<ol style="list-style-type: none"> 1. Scalene, isosceles, and equilateral triangles R94 2. Acute, obtuse, and right triangles N77 3. Classify triangles C64
13.2: Measures of Angles of a Triangle	<ol style="list-style-type: none"> 1. Find missing angles in triangles H6Z
13.3: Right, Isosceles, and Equilateral Triangles	<ol style="list-style-type: none"> 1. Find missing angles in special triangles ZMS
13.4: Triangle Inequalities	<ol style="list-style-type: none"> 1. Triangle inequality 9B2
13.5: Parallelogram, Rhombus, and Trapezoid	<ol style="list-style-type: none"> 1. Properties of parallelograms KPQ <p><i>Also consider</i></p> <ul style="list-style-type: none"> • Classify quadrilaterals 6ZQ • Describe relationships among quadrilaterals SZT

Chapter 14

Surface Area and Volume

Textbook section	IXL skills
14.1: Building Solids Using Unit Cubes	1. Volume of rectangular prisms made of unit cubes I LMJ 2. Volume of irregular figures made of unit cubes WCE
14.2: Drawing Cubes and Rectangular Prisms	
14.3: Prisms and Pyramids	1. Count vertices, edges, and faces ZHF 2. Nets of three-dimensional figures 9LV <i>Also consider</i> <ul style="list-style-type: none"> Identify three-dimensional figures HSR
14.4: Nets and Surface Area	1. Surface area XVX 2. Surface area of triangular prisms UWR <i>Also consider</i> <ul style="list-style-type: none"> Area of squares and rectangles E6B Area of triangles QJT
14.5: Understanding and Measuring Volume	1. Greater or smaller volume NZJ 2. Volume of rectangular prisms made of unit cubes II QX8 <i>Also consider</i> <ul style="list-style-type: none"> Identify objects with volume YEL
14.6: Volume of a Rectangular Prism and Liquid	1. Volume of rectangular prisms CVR 2. Volume of cubes and rectangular prisms: word problems NR6 <i>Also consider</i> <ul style="list-style-type: none"> Relationship between volume and the area of the base: word problems QMA
14.7: Volume of Composite Solids	1. Volume of compound figures J83