



# IXL Skill Alignment

5th Grade alignment for Math in Focus



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# Chapter 1

## Whole Numbers and the Four Operations

### Textbook section

### IXL skills

#### Lesson 1.1: Numbers to 10,000,000

1. Convert between standard and expanded form: up to millions EWK
2. Writing numbers in words to millions: convert digits to words 62R
3. Writing numbers in words to millions: convert words to digits 9P5

#### *Also consider*

- Identify place value names AJY
- Value of a digit U52
- Spell word names for numbers up to one million ZEC

#### Lesson 1.2: Multiplying by Tens, Hundreds, Thousands, and Powers of Tens

1. Multiplication patterns over increasing place values 5N8
2. Multiply numbers ending in zeroes 8WG
3. Multiply a whole number by a power of ten: with exponents YJD

#### *Also consider*

- Multiply by 10 or 100 NP2
- Understanding exponents: powers of 10 64W

#### Lesson 1.3: Dividing by Tens, Hundreds, and Thousands

1. Division patterns over increasing place values V52
2. Divide by numbers ending in zeroes 9YJ

#### *Also consider*

- Estimate quotients: 2-digit divisors EFW

#### Lesson 1.4: Multiplying and Dividing by 2-Digit Numbers Fluently

1. Multiply by 2-digit numbers 9X5
2. Divide by 2-digit numbers 7JE

#### *Also consider*

- Estimate products TKD
- Estimate quotients: 2-digit divisors EFW

- Adjust quotients 5FH

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**Lesson 1.5:** Order of Operations

1. Evaluate numerical expressions Z5N
2. Evaluate numerical expressions with parentheses HGW

*Also consider*

- Evaluate numerical expressions with parentheses in different places 9F5
- Missing operators 8TJ

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**Lesson 1.6:** Real-World Problems: Four Operations of Whole Numbers

1. Add, subtract, multiply, and divide whole numbers: word problems SNZ
2. Multi-step word problems Z76
3. Multi-step word problems involving remainders XGE

*Also consider*

- Multi-step word problems: identify reasonable answers NNJ
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# Chapter 2

## Fractions and Mixed Numbers

Textbook section	IXL skills
<p><b>Lesson 2.1:</b> Fractions, Mixed Numbers, and Division Expressions</p>	<ol style="list-style-type: none"> <li>1. Understand fractions as division: word problems CTD</li> <li>2. Relate division and fractions Z8U</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Convert between improper fractions and mixed numbers B7X</li> </ul>
<p><b>Lesson 2.2:</b> Adding Unlike Fractions and Mixed Numbers</p>	<ol style="list-style-type: none"> <li>1. Add fractions with unlike denominators using models YKV</li> <li>2. Add two or three fractions with unlike denominators 8L4</li> <li>3. Add mixed numbers with unlike denominators 39G</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Estimate sums of fractions using benchmarks 5UQ</li> <li>• Add fractions with unlike denominators using objects KNQ</li> </ul>
<p><b>Lesson 2.3:</b> Subtracting Unlike Fractions and Mixed Numbers</p>	<ol style="list-style-type: none"> <li>1. Subtract fractions with unlike denominators using models U6X</li> <li>2. Subtract fractions with unlike denominators KU6</li> <li>3. Subtract mixed numbers with unlike denominators: with renaming QK5</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Estimate differences of fractions using benchmarks 82J</li> <li>• Subtract fractions with unlike denominators using objects YT7</li> <li>• Inequalities with addition and subtraction of mixed numbers 9GK</li> </ul>

**Lesson 2.4:** Real-World Problems: Fractions and Mixed Numbers

1. Add and subtract fractions with unlike denominators: word problems SJE
2. Add and subtract mixed numbers: word problems 9XV

*Also consider*

- Add and subtract fractions in recipes WTW
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# Chapter 3

## Multiplying and Dividing Fractions and Mixed Numbers

Textbook section	IXL skills
<b>Lesson 3.1:</b> Multiplying Fractions and Whole Numbers	<ol style="list-style-type: none"> <li>1. Fractions of a number I AHX</li> <li>2. Multiply fractions and whole numbers LFP</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Multiply fractions by whole numbers using arrays RB9</li> </ul>
<b>Lesson 3.2:</b> Multiplying Proper Fractions	<ol style="list-style-type: none"> <li>1. Multiply two fractions using models XN6</li> <li>2. Multiply two fractions 6LY</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Multiply three or more fractions and whole numbers Y8U</li> </ul>
<b>Lesson 3.3:</b> Real-World Problems: Multiplying Proper Fractions	<ol style="list-style-type: none"> <li>1. Multiply two fractions: word problems STN</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Multiply fractions and whole numbers: word problems PEF</li> </ul>
<b>Lesson 3.4:</b> Multiplying Improper Fractions	<ul style="list-style-type: none"> <li>• <i>Coming soon:</i> Multiply improper fractions</li> </ul>
<b>Lesson 3.5:</b> Multiplying Mixed Numbers and Whole Numbers	<ol style="list-style-type: none"> <li>1. Multiply a mixed number by a fraction DBZ</li> <li>2. Multiply a mixed number by a whole or mixed number Q9R</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Multiply three or more mixed numbers, fractions, and/or whole numbers VXA</li> </ul>
<b>Lesson 3.6:</b> Real-World Problems: Multiplying Mixed Numbers	<ol style="list-style-type: none"> <li>1. Multiplication with mixed numbers: word problems 59U</li> </ol>
<b>Lesson 3.7:</b> Dividing Fractions and Whole Numbers	<ol style="list-style-type: none"> <li>1. Divide unit fractions by whole numbers GXY</li> <li>2. Divide fractions by whole numbers LMW</li> <li>3. Divide whole numbers by unit fractions 3L9</li> </ol>

*Also consider*

- Divide unit fractions by whole numbers using models XML
- Divide whole numbers by unit fractions using area models JYS

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**Lesson 3.8:** Real-World Problems: Multiplying and Dividing with Fractions

1. Divide unit fractions and whole numbers: word problems G2N
  2. Add, subtract, multiply, and divide fractions: word problems LCU
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# Chapter 4

## Decimals

### Textbook section

### IXL skills

#### Lesson 4.1: Understanding Thousandths

1. Convert fractions and mixed numbers to decimals WKQ
2. Convert decimals between standard and expanded form WTU

#### *Also consider*

- Identify place values in decimal numbers 5N5
- Convert decimals between standard and expanded form using fractions BLQ

#### Lesson 4.2: Comparing, Ordering, and Rounding Decimals

1. Compare decimal numbers NSG
2. Put decimal numbers in order YUX
3. Round decimals MPB

#### *Also consider*

- Compare, order, and round decimals: word problems 2MV

#### Lesson 4.3: Decimals, Fractions, and Mixed Numbers

1. Convert decimals to fractions and mixed numbers LZN
2. Convert fractions and mixed numbers to decimals Y59

#### *Also consider*

- Model decimals and fractions ZKL



# Chapter 5

## Four Operations of Decimals

Textbook section	IXL skills
<b>Lesson 5.1:</b> Adding Decimals	1. Add two decimal numbers UD2  <i>Also consider</i> <ul style="list-style-type: none"> <li>Choose decimals with a particular sum 64R</li> <li>Complete the decimal addition sentence 7KW</li> </ul>
<b>Lesson 5.2:</b> Subtracting Decimals	1. Subtract two decimal numbers 98H  <i>Also consider</i> <ul style="list-style-type: none"> <li>Choose decimals with a particular difference AMH</li> <li>Complete the decimal subtraction sentence TWB</li> <li>Add and subtract decimals: word problems VMT</li> </ul>
<b>Lesson 5.3:</b> Multiplying Decimals	1. Multiply a decimal by a one-digit whole number XNY  <i>Also consider</i> <ul style="list-style-type: none"> <li>Multiply a decimal by a one-digit whole number using blocks U5Q</li> </ul>
<b>Lesson 5.4:</b> Multiplying Decimals by Tens, Hundreds, Thousands, and Powers of Ten	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
<b>Lesson 5.5:</b> 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"> <li>Divide decimals by one-digit whole numbers: word problems D66</li> </ul>

**Lesson 5.6:** Dividing Decimals by Tens, Hundreds, and Thousands

1. Divide by powers of ten H2N
2. Divide by a power of ten with decimals: find the missing number R2P

*Also consider*

- Decimal division patterns over increasing place values GNC

**Lesson 5.7:** 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

**Lesson 5.8:** 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

**Lesson 5.9:** 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 6

## Volume

Textbook section	IXL skills
<b>Lesson 6.1:</b> Building Solids Using Unit Cubes	<ol style="list-style-type: none"> <li>Volume of rectangular prisms made of unit cubes I LMJ</li> <li>Volume of irregular figures made of unit cubes WCE</li> </ol>
<b>Lesson 6.2:</b> Understanding and Measuring Volume	<ol style="list-style-type: none"> <li>Greater or smaller volume NZJ</li> <li>Volume of rectangular prisms made of unit cubes II QX8</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>Identify objects with volume YEL</li> </ul>
<b>Lesson 6.3:</b> Real-World Problems: Volume of Rectangular Prisms	<ol style="list-style-type: none"> <li>Volume of rectangular prisms CVR</li> <li>Volume of cubes and rectangular prisms: word problems NR6</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>Relationship between volume and the area of the base: word problems QMA</li> <li>Compare volumes and dimensions of rectangular prisms: word problems JP6</li> </ul>
<b>Lesson 6.4:</b> Real-World Problems: Volume of Composite Solids	<ol style="list-style-type: none"> <li>Volume of compound figures J83</li> </ol>

# Chapter 7

## Line Plots and the Coordinate Plane

### Textbook section

### IXL skills

#### Lesson 7.1: Making and Interpreting Line Plots

1. Create line plots ZBV
2. Interpret line plots 79C
3. Create and interpret line plots with fractions XBS

#### Lesson 7.2: Graphing on a Coordinate Plane

1. Objects on a coordinate plane NTR
2. Graph points on a coordinate plane AST
3. Interpret a graph: word problems AVP

#### *Also consider*

- Describe the coordinate plane PF8
- Graph points from a table HWV
- Graph a two-variable relationship QEH

#### Lesson 7.3: Number Patterns and Graphs

1. Find the rule from a table: word problems PN6
2. Compare patterns XPM

#### *Also consider*

- Use a rule to complete a number sequence RPP
- Use a rule to complete a table and a graph N9B

# Chapter 8

## Polygons

### Textbook section

### IXL skills

**Lesson 8.1:** Classifying Triangles

1. Scalene, isosceles, and equilateral triangles R94
2. Acute, obtuse, and right triangles N77
3. Classify triangles C64

**Lesson 8.2:** Classifying Polygons

1. Regular and irregular polygons UHC
2. Classify quadrilaterals 6ZQ
3. Identify the relationships between quadrilaterals KCG

*Also consider*

- Is it a polygon? ZH6
- Number of sides in polygons 4Z2
- Describe relationships among quadrilaterals SZT

# Chapter 9

## Ratio

Textbook section	IXL skills
<b>Lesson 9.1:</b> Finding Ratio	1. Write a ratio GF8
<b>Lesson 9.2:</b> Equivalent Ratios	1. Identify equivalent ratios TSH
<b>Lesson 9.3:</b> Comparing Three Quantities	1. Write an equivalent ratio TSU
<b>Lesson 9.4:</b> Real-World Problems: Ratio	1. Write a ratio: word problems GC7 2. Equivalent fractions: word problems 84W  <i>Also consider</i> <ul style="list-style-type: none"><li>• Equivalent ratios: word problems SDT</li></ul>

# Chapter 10

## Percent

Textbook section	IXL skills
<b>Lesson 10.1:</b> Percent	<ol style="list-style-type: none"><li>1. What percentage is illustrated? DSJ</li><li>2. Convert between percents, fractions, and decimals: denominators of 10 or 100 66Q</li></ol>
<b>Lesson 10.2:</b> Fractions, Decimals, and Percent	<ol style="list-style-type: none"><li>1. Convert fractions to percents using grid models RPT</li><li>2. Convert between percents, fractions, and decimals 2VM</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Find what percent one number is of another: word problems J6P</li></ul>
<b>Lesson 10.3:</b> Percent of a Quantity	<ol style="list-style-type: none"><li>1. Percent of a number 68S</li><li>2. Percent of a number: word problems XTQ</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Compare percentages 65A</li></ul>
<b>Lesson 10.4:</b> Real-World Problems: Percent	<ol style="list-style-type: none"><li>1. Sale prices CE8</li><li>2. Percents: calculate tax, tip, and more U7J</li></ol>