



# IXL Skill Alignment

3rd grade alignment for GO Math! 2015



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# Chapter 1

## Addition and Subtraction Within 1,000

Textbook section	IXL skills
<b>1.1:</b> Number Patterns	<ol style="list-style-type: none"> <li>Even or odd U9Q</li> <li>Even or odd: addition patterns L63</li> </ol>
<b>1.2:</b> Round to the Nearest Ten or Hundred	<ol style="list-style-type: none"> <li>Round to the nearest ten or hundred using a number line 6ST</li> <li>Round to the nearest ten or hundred Q65</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>Rounding puzzles SFM</li> </ul>
<b>1.3:</b> Estimate Sums	<ol style="list-style-type: none"> <li>Estimate sums using compatible numbers HRT</li> <li>Estimate sums by rounding: up to 1,000 3Y9</li> <li>Estimate sums by rounding: word problems WB2</li> </ol>
<b>1.4:</b> Mental Math Strategies for Addition	<ol style="list-style-type: none"> <li>Use compensation to add: up to three digits H7K</li> </ol>
<b>1.5:</b> Use Properties to Add	<ol style="list-style-type: none"> <li>Add using properties KYA</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>Properties of addition NY2</li> <li>Complete the equation using properties of addition CGS</li> </ul>
<b>1.6:</b> Use the Break Apart Strategy to Add	<ol style="list-style-type: none"> <li>Add two numbers up to three digits E83</li> <li>Add two numbers up to three digits: word problems QU2</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>Estimate sums: round to hundreds H7F</li> </ul>
<b>1.7:</b> Use Place Value to Add	<ol style="list-style-type: none"> <li>Add two numbers up to three digits: with regrouping 9NH</li> <li>Add three numbers up to three digits each GSY</li> <li>Addition up to three digits: fill in the missing digits LYB</li> </ol>

*Also consider*

- Use models to add three-digit numbers: without regrouping ZBB
- Use models to add three-digit numbers: with regrouping NWW
- Add three numbers up to three digits each: word problems NPU
- Complete the addition sentence: up to three digits D69

**1.8: Estimate Differences**

1. Estimate differences using compatible numbers PVS
2. Estimate differences by rounding: up to 1,000 A47
3. Estimate differences by rounding: word problems M42

*Also consider*

- Estimate sums and differences MTL
- Estimate sums and differences: word problems BU8

**1.9: Mental Math Strategies for Subtraction**

1. Subtract with two-digit or three-digit numbers MY5
2. Use compensation to subtract: up to three digits WPW

**1.10: Use Place Value to Subtract**

1. Subtract numbers up to three digits EHT
2. Subtract numbers up to three digits: word problems K88
3. Complete the subtraction sentence: up to three digits MD8

*Also consider*

- Use models to subtract numbers up to three-digits: without regrouping 9NU
- Use models to subtract numbers up to three-digits: with regrouping 5YV
- Subtraction: fill in the missing digits V63

**1.11: Combine Place Values to Subtract**

1. Subtract three-digit numbers: regroup tens or hundreds U8E
2. Subtract across zeros 93U



**1.12: Model Addition and Subtraction**

1. Addition and subtraction word problems XSH
  2. Two-step addition and subtraction word problems CBA
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# Chapter 2

## Represent and Interpret Data

Textbook section	IXL skills
<b>2.1:</b> Organize Data	<ol style="list-style-type: none"><li>1. Interpret tally charts 8CW</li><li>2. Interpret frequency charts 5KV</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Read a table DE2</li></ul>
<b>2.2:</b> Use Picture Graphs	<ol style="list-style-type: none"><li>1. Interpret pictographs Y5D</li></ol>
<b>2.3:</b> Make Picture Graphs	<ol style="list-style-type: none"><li>1. Create pictographs AVG</li></ol>
<b>2.4:</b> Use Bar Graphs	<ol style="list-style-type: none"><li>1. Read bar graphs NL8</li></ol>
<b>2.5:</b> Make Bar Graphs	<ol style="list-style-type: none"><li>1. Create bar graphs RPF</li></ol>
<b>2.6:</b> Solve Problems Using Data	<ol style="list-style-type: none"><li>1. Use bar graphs to solve problems BCJ</li></ol>
<b>2.7:</b> Use and Make Line Plots	<ol style="list-style-type: none"><li>1. Interpret line plots YXD</li><li>2. Create line plots H5J</li></ol>

# Chapter 3

## Understand Multiplication

Textbook section	IXL skills
<b>3.1:</b> Count Equal Groups	1. Count equal groups 9K7
<b>3.2:</b> Relate Addition and Multiplication	1. Relate addition and multiplication for equal groups GGC 2. Write multiplication sentences for equal groups V98 3. Relate addition and multiplication P74  <i>Also consider</i> <ul style="list-style-type: none"> <li>Identify multiplication expressions for equal groups 9AE</li> </ul>
<b>3.3:</b> Skip Count on a Number Line	1. Write multiplication sentences for number lines NTV  <i>Also consider</i> <ul style="list-style-type: none"> <li>Skip-counting LQM</li> <li>Skip-counting puzzles 78C</li> </ul>
<b>3.4:</b> Model Multiplication	1. Multiplication word problems: identify the product XZ5
<b>3.5:</b> Model with Arrays	1. Identify multiplication expressions for arrays HZL 2. Write multiplication sentences for arrays 5FZ 3. Make arrays to model multiplication PPR
<b>3.6:</b> Commutative Property of Multiplication	1. Write two multiplication sentences for an array QLK
<b>3.7:</b> Multiply with 1 and 0	1. Multiply by 0 or 1 CNG 2. Multiply by 0 or 1: complete the sentence RBK

# Chapter 4

## Multiplication Facts and Strategies

Textbook section	IXL skills
<b>4.1:</b> Multiply with 2 and 4	<ol style="list-style-type: none"><li>1. Multiply by 2 94M</li><li>2. Multiply by 4 5U6</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Add doubles NLQ</li></ul>
<b>4.2:</b> Multiply with 5 and 10	<ol style="list-style-type: none"><li>1. Multiply by 5 Y9E</li><li>2. Multiply by 10 6YD</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Multiply by 5 and 10 G48</li></ul>
<b>4.3:</b> Multiply with 3 and 6	<ol style="list-style-type: none"><li>1. Multiply by 3 38K</li><li>2. Multiply by 6 SX6</li><li>3. Multiplication word problems: factors up to 5 HDU</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Multiplication facts for 2, 3, 4, 5, and 10: find the missing factor ZEY</li><li>• Multiplication facts for 2, 3, 4, 5, and 10: sorting REN</li><li>• Multiplication facts for 2, 3, 4, 5, and 10: true or false? 87M</li><li>• Multiplication tables for 2, 3, 4, 5, and 10 DW5</li></ul>
<b>4.4:</b> Distributive Property	<ol style="list-style-type: none"><li>1. Multiply using the distributive property 6W7</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Distributive property: find the missing factor 7VP</li></ul>
<b>4.5:</b> Multiply with 7	<ol style="list-style-type: none"><li>1. Multiply by 7 9PT</li></ol>

**4.6: Associative Property of Multiplication**

1. Multiply three numbers 9DF

*Also consider*

- Properties of multiplication MPE
- Solve using properties of multiplication YPF

**4.7: Patterns on the Multiplication Table**

1. Even or odd: multiplication patterns WS2

**4.8: Multiply with 8**

1. Multiply by 8 SMR

*Also consider*

- Multiply by 2, 4, 6, 8 and 10 FKS

**4.9: Multiply with 9**

1. Multiply by 9 SUH

*Also consider*

- Multiplication tables up to 10 PNV
- Multiplication facts for 6, 7, 8, and 9: sorting TZ7
- Inequalities with multiplication DVE

**4.10: Multiplication**

1. Multiplication word problems 9TA
2. Multiply whole numbers in recipes PSK

*Also consider*

- Multiplication facts up to 10: true or false? 3K8
- Multiplication sentences up to 10: true or false? MTU
- Squares up to 10 x 10 GMM



# Chapter 5

## Use Multiplication Facts

Textbook section	IXL skills
<b>5.1:</b> Describe Patterns	<ol style="list-style-type: none"><li>1. Multiplication input/output tables 8CM</li><li>2. Multiplication input/output tables: find the rule D5U</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Skip-counting with tables VA9</li></ul>
<b>5.2:</b> Find Unknown Numbers	<ol style="list-style-type: none"><li>1. Multiplication facts up to 10: find the missing factor FZA</li></ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"><li>• Make arrays to model multiplication: given products TY9</li><li>• Multiplication facts up to 10: select the missing factors WZA</li></ul>
<b>5.3:</b> Use the Distributive Property	
<b>5.4:</b> Multiplication Strategies with Multiples of 10	<ol style="list-style-type: none"><li>1. Multiply by a multiple of ten using place value GPN</li><li>2. Multiply by a multiple of ten MS6</li></ol>
<b>5.5:</b> Multiply 1-Digit Numbers by Multiples of 10	<ol style="list-style-type: none"><li>1. Multiply multiples of ten by one-digit numbers FYX</li></ol>

# Chapter 6

## Understand Division

Textbook section	IXL skills
<b>6.1:</b> Model Division	1. Division word problems: divisors and quotients up to 5 <small>CFR</small>
<b>6.2:</b> Size of Equal Groups	1. Divide by counting equal groups <small>UYK</small>
<b>6.3:</b> Number of Equal Groups	
<b>6.4:</b> Model with Bar Models	1. Write division sentences for groups <small>FSX</small> 2. Division word problems <small>ECS</small>
<b>6.5:</b> Relate Subtraction and Division	1. Divide using repeated subtraction <small>V5C</small>
<b>6.6:</b> Model with Arrays	1. Write division sentences for arrays <small>8RW</small>
<b>6.7:</b> Relate Multiplication and Division	1. Relate multiplication and division for arrays <small>XSK</small>  <i>Also consider</i> • Relate multiplication and division for groups <small>FTU</small>
<b>6.8:</b> Write Related Facts	1. Relate multiplication and division <small>67L</small> 2. Multiplication word problems: find the missing factor <small>F6C</small>
<b>6.9:</b> Division Rules for 1 and 0	1. Divide by 1 <small>VTL</small>  <i>Also consider</i> • Multiply and divide with 1 and 0 <small>XWR</small>

# Chapter 7

## Division Facts and Strategies

Textbook section	IXL skills
<b>7.1:</b> Divide by 2	1. Divide by 2 ANU
<b>7.2:</b> Divide by 10	1. Divide by 10 YRG  <i>Also consider</i> • Multi-step inequalities C6M
<b>7.3:</b> Divide by 5	1. Divide by 5 C9M  <i>Also consider</i> • Multiply and divide by 2 and 5 CPH • Multiply and divide by 5 and 10 QAF
<b>7.4:</b> Divide by 3	1. Divide by 3 PCL
<b>7.5:</b> Divide by 4	1. Divide by 4 QGT 2. Division facts for 2, 3, 4, 5, and 10 2JB  <i>Also consider</i> • Multiplication and division word problems: factors up to 5 7HS • Multiplication and division facts up to 5: true or false? 6HS • Division facts for 2, 3, 4, 5, and 10: true or false? YSD • Division facts for 2, 3, 4, 5, and 10: sorting XDN
<b>7.6:</b> Divide by 6	1. Divide by 6 97S
<b>7.7:</b> Divide by 7	1. Divide by 7 D2F
<b>7.8:</b> Divide by 8	1. Divide by 8 CVD

**7.9: Divide by 9**

1. Divide by 9 RTB

*Also consider*

- Multiplication and division word problems 85K
  - Write variable equations to represent word problems: multiplication and division only ZNN
  - Division facts for 6, 7, 8, and 9 U2C
  - Division facts for 6, 7, 8, and 9: true or false? DBB
  - Division facts for 6, 7, 8, and 9: sorting KQR
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**7.10: Two-Step Problems**

1. Two-step multiplication and division word problems 8FP

*Also consider*

- Division facts up to 10 M8T
  - Division facts up to 10: true or false? MPV
  - Division facts up to 10: sorting CYJ
  - Division sentences up to 10: true or false? GMU
- 

**7.11: Order of Operations**

1. Perform multiple operations with whole numbers UKB
2. Two-step mixed operation word problems SRL

*Also consider*

- Two-step word problems: identify reasonable answers V5A
  - Understanding parentheses AYY
  - Multiplication and division facts up to 10: true or false? WQT
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# Chapter 8

## Understand Fractions

Textbook section	IXL skills
<b>8.1:</b> Equal Parts of a Whole	<ol style="list-style-type: none"> <li>1. Identify equal parts FHY</li> <li>2. Identify halves, thirds, and fourths 2T6</li> </ol>
<b>8.2:</b> Equal Shares	<ol style="list-style-type: none"> <li>1. Make halves, thirds, fourths, sixths, and eighths JHE</li> </ol>
<b>8.3:</b> Unit Fractions of a Whole	<ol style="list-style-type: none"> <li>1. Match unit fractions to models CPK</li> <li>2. Unit fractions: word problems HM7</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Unit fractions: modeling word problems UV8</li> <li>• Write fractions using numbers and words 7FX</li> </ul>
<b>8.4:</b> Fractions of a Whole	<ol style="list-style-type: none"> <li>1. Understand fractions: area models RTW</li> <li>2. Show fractions: area models NLE</li> <li>3. Fractions of a whole: word problems BV7</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Match fractions to models YHL</li> <li>• Fractions of a whole: modeling word problems 9PU</li> <li>• Understand fractions: fraction bars 6JL</li> <li>• Show fractions: fraction bars ZPW</li> </ul>
<b>8.5:</b> Fractions on a Number Line	<ol style="list-style-type: none"> <li>1. Identify fractions on number lines AWH</li> <li>2. Graph fractions less than 1 on number lines HWJ</li> </ol> <p><i>Also consider</i></p> <ul style="list-style-type: none"> <li>• Identify unit fractions on number lines JVC</li> <li>• Fractions of number lines J8M</li> </ul>
<b>8.6:</b> Relate Fractions and Whole Numbers	<ol style="list-style-type: none"> <li>1. Select fractions equivalent to whole numbers using models GKZ</li> </ol>

2. Graph fractions equivalent to 1 on number lines 7BL
  3. Select fractions equivalent to whole numbers 42U
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**8.7: Fractions of a Group**

1. Fractions of a group: unit fractions SSY
2. Fractions of a group 5Z6

*Also consider*

- Fractions of a group: word problems Z65
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**8.8: Find Part of a Group Using Unit Fractions**

1. Fractions of a number - unit fractions W5M
  2. Fractions of a number - unit fractions: word problems C9P
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**8.9: Find the Whole Group Using Unit Fractions**

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# Chapter 9

## Compare Fractions

Textbook section	IXL skills
<b>9.1:</b> Compare Fractions	1. Compare fractions using models MJ2
<b>9.2:</b> Compare Fractions with the Same Denominator	1. Graph and compare fractions with like denominators on number lines 63U 2. Compare fractions with like denominators 8SU  <i>Also consider</i> <ul style="list-style-type: none"> <li>Compare fractions with like denominators using models TDE</li> <li>Order fractions with like denominators HYZ</li> </ul>
<b>9.3:</b> Compare Fractions with the Same Numerator	1. Compare fractions with like numerators using models RGM 2. Compare fractions with like numerators 7LX  <i>Also consider</i> <ul style="list-style-type: none"> <li>Order fractions with like numerators PCW</li> </ul>
<b>9.4:</b> Compare Fractions	1. Compare fractions 78D 2. Graph smaller or larger fractions on a number line 2PH  <i>Also consider</i> <ul style="list-style-type: none"> <li>Graph and compare fractions on number lines 6H5</li> <li>Compare fractions in recipes 9BK</li> </ul>
<b>9.5:</b> Compare and Order Fractions	1. Order fractions GBA  <i>Also consider</i> <ul style="list-style-type: none"> <li>Graph and order fractions on number lines T7E</li> </ul>
<b>9.6:</b> Model Equivalent Fractions	1. Find an equivalent fraction using an area model GN9 2. Find equivalent fractions using number lines JL8

*Also consider*

- Identify equivalent fractions on number lines HYM
- Graph equivalent fractions on number lines WPQ
- Identify equivalent fractions 7DA

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**9.7: Equivalent Fractions**

1. Find equivalent fractions using area models: two models ZJ2

*Also consider*

- Find equivalent fractions WMX
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# Chapter 10

## Time, Length, Liquid Volume, and Mass

Textbook section	IXL skills
<b>10.1:</b> Time to the Minute	1. Read clocks and write times 5ZQ 2. Write times EQS  <i>Also consider</i> <ul style="list-style-type: none"> <li>Match analog and digital clocks L5U</li> <li>Match clocks and times LPT</li> </ul>
<b>10.2:</b> A.M. and P.M.	1. A.M. or P.M. MUC  <i>Also consider</i> <ul style="list-style-type: none"> <li>Reading a timeline LDK</li> <li>Reading schedules SWU</li> </ul>
<b>10.3:</b> Measure Time Intervals	1. Find the elapsed time SCQ 2. Elapsed time word problems: find the elapsed time V9D
<b>10.4:</b> Use Time Intervals	1. Elapsed time: find the end time U7B 2. Elapsed time word problems: find the end time 5VC 3. Find start and end times: two-step word problems C95
<b>10.5:</b> Time Intervals	1. Time word problems: find the start, end, or elapsed time MNY
<b>10.6:</b> Measure Length	1. Measure using an inch ruler: nearest $\frac{1}{4}$ inch 5R3 2. Create line plots with fractions YUR  <i>Also consider</i> <ul style="list-style-type: none"> <li>Create and interpret line plots with fractions B8Q</li> </ul>
<b>10.7:</b> Estimate and Measure Liquid Volume	1. Which metric unit of volume is appropriate? LYS

**10.8:** Estimate and Measure Mass

1. Which metric unit of weight is appropriate? PTF

*Also consider*

- Compare and convert metric units of weight C9Z
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**10.9:** Solve Problems About Liquid Volume and Mass

1. Measurement word problems VPW

*Also consider*

- Choose the appropriate measuring tool FTA
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# Chapter 11

## Perimeter and Area

Textbook section	IXL skills
<b>11.1:</b> Model Perimeter	1. Perimeter of figures on grids TQP
<b>11.2:</b> Find Perimeter	1. Perimeter of rectangles ZJT 2. Perimeter of polygons LLY 3. Find the perimeter: word problems PCZ  <i>Also consider</i> <ul style="list-style-type: none"> <li>Perimeter of rectilinear shapes 65Z</li> </ul>
<b>11.3:</b> Find Unknown Side Lengths	1. Perimeter of polygons: find the missing side lengths 5X5 2. Find the missing side length of a rectangle: word problems DKC
<b>11.4:</b> Understand Area	1. Area of figures on grids J93 2. Create figures with a given area Z2H
<b>11.5:</b> Measure Area	1. Find the area of figures made of unit squares FLQ 2. Tile a rectangle and find the area EKK  <i>Also consider</i> <ul style="list-style-type: none"> <li>Select figures with a given area XR6</li> <li>Select two figures with the same area 7GW</li> </ul>
<b>11.6:</b> Use Area Models	1. Multiply to find the area of a rectangle made of unit squares S7G 2. Create rectangles with a given area V73
<b>11.7:</b> Area of Rectangles	1. Find the area of rectangles and squares 8KJ 2. Find the area of rectangles: word problems 5HA
<b>11.8:</b> Area of Combined Rectangles	1. Find the areas of complex figures by dividing them into rectangles DVB

*Also consider*

- Find the area of complex figures SGP

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**11.9:** Same Perimeter, Different Areas

1. Relationship between area and perimeter: find the area KNR

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**11.10:** Same Area, Different Perimeters

1. Relationship between area and perimeter: find the perimeter ZWF

*Also consider*

- Find the missing side length of a rectangle X66
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# Chapter 12

## Two-Dimensional Shapes

Textbook section	IXL skills
<b>12.1:</b> Describe Plane Shapes	1. Points, lines, line segments, and rays DFS
<b>12.2:</b> Describe Angles in Plane Shapes	1. Angles greater than, less than, or equal to a right angle 2YR
<b>12.3:</b> Identify Polygons	1. Is it a polygon? C2P 2. Count and compare sides and vertices GWA
<b>12.4:</b> Describe Sides of Polygons	1. Parallel, perpendicular, and intersecting lines 9SX 2. Parallel sides in quadrilaterals 6E9
<b>12.5:</b> Classify Quadrilaterals	1. Identify parallelograms V6L 2. Identify trapezoids 67A 3. Identify rectangles 47T 4. Identify rhombuses ZSD
<b>12.6:</b> Draw Quadrilaterals	1. Draw quadrilaterals 5KS
<b>12.7:</b> Describe Triangles	1. Acute, obtuse, and right triangles LRU 2. Scalene, isosceles, and equilateral triangles UZG
<b>12.8:</b> Classify Plane Shapes	1. Classify quadrilaterals CNJ  <i>Also consider</i> • Sort shapes into a Venn diagram 9L6
<b>12.9:</b> Relate Shapes, Fractions, and Area	1. Make halves, thirds, and fourths HGP 2. Make sixths and eighths KTM  <i>Also consider</i> • Make halves, thirds, and fourths in different ways DXJ