



IXL Skill Alignment

Grade 3 Math alignment for EngageNY Common Core Curriculum

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Module 1

Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

| Topics | IXL skills |
|--|--|
| A: Multiplication and the Meaning of Factors | E.1 Count equal groups >> |
| | E.2 Identify multiplication expressions for equal groups >> |
| | E.3 Write multiplication sentences for equal groups >> |
| | E.4 Relate addition and multiplication for equal groups >> |
| | E.5 Identify multiplication expressions for arrays >> |
| | E.6 Write multiplication sentences for arrays >> |
| | E.7 Make arrays to model multiplication >> |
| | N.9 Relate addition and multiplication >> |
| B: Division as an Unknown Factor Problem | I.1 Divide by counting equal groups >> |
| | I.2 Write division sentences for groups >> |
| | I.3 Relate multiplication and division for groups >> |
| | I.4 Write division sentences for arrays >> |
| | I.5 Relate multiplication and division for arrays >> |
| C: Multiplication Using Units of 2 and 3 | A.6 Skip-counting >> |
| | F.3 Multiply by 2 >> |
| | F.4 Multiply by 3 >> |
| D: Division Using Units of 2 and 3 | |
| E: Multiplication and Division Using Units of 4 | F.5 Multiply by 4 >> |

F: Distributive Property and Problem Solving
Using Units of 2–5 and 10

Module 2

Place Value and Problem Solving with Units of Measure

| Topics | IXL skills |
|---|---|
| A: Time Measurement and Problem Solving | Coming soon! |
| B: Measuring Weight and Liquid Volume in Metric Units | <p>U.14 Which metric unit of weight is appropriate? >></p> <p>U.19 Compare and convert metric units of volume >></p> |
| C: Rounding to the Nearest Ten and Hundred | P.1 Rounding - nearest ten or hundred only >> |
| D: Two- and Three-Digit Measurement Addition Using the Standard Algorithm | <p>C.1 Add two numbers up to three digits >></p> <p>C.3 Add two numbers up to three digits - word problems >></p> <p>P.6 Estimate sums up to 1,000 >></p> |
| E: Two- and Three-Digit Measurement Subtraction Using the Standard Algorithm | <p>D.1 Subtract numbers up to three digits >></p> <p>D.3 Subtract numbers up to three digits - word problems >></p> <p>P.8 Estimate differences up to 1,000 >></p> |

Module 3

Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10

| Topics | IXL skills |
|--|--|
| A: The Properties of Multiplication and Division | G.5 Multiplication tables for 6, 7, 8, and 9 >> |
| | G.8 Multiplication facts for 6, 7, 8, and 9: find the missing factor >> |
| | G.12 Multiplication facts up to 10: find the missing factor >> |
| | K.10 Division facts up to 10: find the missing number >> |
| | O.3 Solve for the variable: multiplication and division >> |
| | <i>See also:</i> |
| | G.6 Multiplication facts for 6, 7, 8, 9: true or false? >> |
| B: Multiplication and Division Using Units of 6 and 7 | F.7 Multiply by 6 >> |
| | F.8 Multiply by 7 >> |
| | J.6 Divide by 6 >> |
| | J.7 Divide by 7 >> |
| C: Multiplication and Division Using Units up to 8 | F.9 Multiply by 8 >> |
| | H.6 Multiplication word problems >> |
| | J.8 Divide by 8 >> |
| | L.6 Division word problems >> |
| | N.2 Understanding parentheses >> |
| D: Multiplication and Division Using Units of 9 | F.10 Multiply by 9 >> |
| | J.9 Divide by 9 >> |

E: Analysis of Patterns and Problem Solving
Including Units of 0 and 1

F.1 Multiply by 0 >>

F.2 Multiply by 1 >>

J.1 Divide by 1 >>

N.7 Distributive property: find the missing
factor >>

F: Multiplication of Single-Digit Factors and
Multiples of 10

H.1 Multiply by a multiple of ten >>

Module 4

Multiplication and Area

| Topics | IXL skills |
|--|--|
| A: Foundations for Understanding Area | V.10 Area of figures made of unit squares >> V.11 Create figures with a given area >> |
| B: Concepts of Area Measurement | V.12 Area of rectangles >> |
| C: Arithmetic Properties Using Area Models | |
| D: Applications of Area Using Side Lengths of Figures | V.11 Create figures with a given area >> V.12 Area of rectangles >> V.13 Area of squares and rectangles: word problems >> V.15 Area between two rectangles >> <i>See also:</i> V.14 Area of complex figures (with all right angles) >> |

Module 5

Fractions as Numbers on the Number Line

| Topics | IXL skills |
|---|--|
| A: Partition a Whole into Equal Parts | W.1 Identify equal parts >> |
| B: Unit Fractions and Their Relation to the Whole | W.1 Identify equal parts >> |
| | W.2 Identify halves, thirds, and fourths >> |
| | W.3 Understand fractions: fraction bars >> |
| | W.4 Understand fractions: area models >> |
| | W.5 Match unit fractions to models >> |
| | W.6 Match fractions to models >> |
| | W.7 Show fractions: fraction bars >> |
| | W.8 Show fractions: area models >> |
| W.17 Unit fractions: word problems >> | |
| C: Comparing Unit Fractions and Specifying the Whole | |

D: Fractions on the Number Line

- W.13** Graph unit fractions on number lines >>
- W.14** Graph fractions on number lines >>
- W.15** Graph smaller or larger fractions on a number line >>
- X.8** Graph fractions equivalent to 1 on number lines >>
- Y.2** Compare fractions using number lines >>
- Y.3** Graph and compare fractions with like denominators on number lines >>
- Y.4** Graph and compare fractions with like numerators on number lines >>
- Y.5** Graph and compare fractions on number lines >>
- Y.6** Compare fractions >>
- Y.9** Graph and order fractions on number lines >>

See also:

- W.11** Identify unit fractions on number lines >>
- X.9** Find fractions equivalent to whole numbers >>

E: Equivalent Fractions

- W.11** Identify unit fractions on number lines >>
 - W.12** Identify fractions on number lines >>
 - X.2** Identify equivalent fractions on number lines >>
 - X.3** Find equivalent fractions using number lines >>
 - X.4** Graph equivalent fractions on number lines >>
 - X.7** Select fractions equivalent to whole numbers using area models >>
 - X.8** Graph fractions equivalent to 1 on number lines >>
 - X.9** Find fractions equivalent to whole numbers >>
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F: Comparison, Order, and Size of Fractions

Y.4 Graph and compare fractions with like numerators on number lines >>

Y.10 Order fractions with like numerators >>

Module 6

Collecting and Displaying Data

| Topics | IXL skills |
|---|---|
| A: Generate and Analyze Categorical Data | T.4 Interpret tally charts and tables >> |
| | T.5 Interpret bar graphs >> |
| | T.6 Create bar graphs >> |
| | T.7 Interpret line plots >> |
| | T.9 Interpret pictographs >> |
| | T.10 Create pictographs >> |
| B: Generate and Analyze Measurement Data | T.4 Interpret tally charts and tables >> |
| | T.5 Interpret bar graphs >> |
| | T.6 Create bar graphs >> |
| | T.7 Interpret line plots >> |
| | T.8 Create line plots >> |
| | T.9 Interpret pictographs >> |
| | T.10 Create pictographs >> |
| U.3 Measure using an inch ruler >> | |

Module 7

Geometry and Measurement Word Problems

| Topics | IXL skills |
|---|---|
| A: Solving Word Problems | |
| B: Attributes of Two-Dimensional Figures | V.3 Count and compare sides and angles >> V.10 Area of figures made of unit squares >> V.12 Area of rectangles >> V.26 Classify quadrilaterals >> |
| C: Problem Solving with Perimeter | V.8 Perimeter >> V.9 Perimeter: find the missing side length >> |
| D: Recording Perimeter and Area Data on Line Plots | T.7 Interpret line plots >> T.8 Create line plots >> V.11 Create figures with a given area >> V.16 Compare area and perimeter of two figures >> |
| E: Problem Solving with Perimeter and Area | V.8 Perimeter >> V.13 Area of squares and rectangles: word problems >> V.15 Area between two rectangles >> <i>See also:</i> V.14 Area of complex figures (with all right angles) >> V.18 Relationship between area and perimeter >> |

F: Year in Review

- A.6** Skip-counting >>
- C.1** Add two numbers up to three digits >>
- D.1** Subtract numbers up to three digits >>
- E.1** Count equal groups >>
- E.2** Identify multiplication expressions for equal groups >>
- E.3** Write multiplication sentences for equal groups >>
- E.4** Relate addition and multiplication for equal groups >>
- E.5** Identify multiplication expressions for arrays >>
- E.7** Make arrays to model multiplication >>
- G.15** Multiplication tables up to 12 >>
- G.17** Multiplication facts up to 12: find the missing factor >>
- I.1** Divide by counting equal groups >>
- I.2** Write division sentences for groups >>
- I.4** Write division sentences for arrays >>
- K.7** Division facts up to 10 >>
- N.2** Understanding parentheses >>
- N.7** Distributive property: find the missing factor >>
- P.1** Rounding - nearest ten or hundred only >>
- T.5** Interpret bar graphs >>
- T.6** Create bar graphs >>
- T.7** Interpret line plots >>
- T.8** Create line plots >>
- U.3** Measure using an inch ruler >>
- V.8** Perimeter >>
- V.12** Area of rectangles >>
- V.16** Compare area and perimeter of two figures >>
- V.26** Classify quadrilaterals >>
- W.2** Identify halves, thirds, and fourths >>

W.5 Match unit fractions to models >>

W.6 Match fractions to models >>

W.7 Show fractions: fraction bars >>

W.8 Show fractions: area models >>
