

Grade 5

Not sure how to help your child with homework? Looking for extra practice to help your child succeed? GO Math! ${ }^{\text {® }}$ Grade 5 has a variety of resources that can help you understand lesson content and provide your child with educational opportunities online.

These resources can be accessed through your child's ThinkCentral account. After logging in, click on Student Library and you'll find the resources described below. The items in the Student Library are for practice at any time. Usage and results are not sent to the teacher. Make sure you also check your child's To Do list, which may contain assignments from the teacher that will send results to the teacher.

## Interactive Student Edition

These activities explain the content of the lesson using a few examples. The last two screens offer practice problems from the Personal Math Trainer ${ }^{\oplus}$ Powered by Knewton ${ }^{\text {m". }}$.

## Math on the Spot

These videos feature a GO Math! author discussing lesson content and solving a problem that exemplifies lesson content. They can also be accessed via the QR codes in the print student book.

## Animated Math Models*

These mini-lessons focus on a specific skill that relates to the lesson.

## iTools*

These virtual manipulatives may be used in the classroom to help students model and discuss problems in the lesson.

## Mega Math*

This game-like environment will challenge students to answer questions related to the lesson content.

## Chapter 1: Place Value, Multiplication, and Expressions

| Lesson <br> Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Investigate • Place Value and Patterns | $\checkmark$ | $\checkmark$ |  |  | Base-Ten Blocks-Activity 1: Show (Thousands) |  | Commutative Property of Addition, Identity Property of Addition, pattern, even, odd |
| 2 | Place Value of Whole Numbers | $\checkmark$ | $\checkmark$ | Place Value | 1 |  | The Number Games, Tiny's Think Tank, Level A | Round |
| 3 | Algebra • Properties | $\checkmark$ | $\checkmark$ | Algebra: Properties and Mental Math Strategies | 2 | Counters-Activity 2: <br> Compare (Counters) |  | Compatible numbers, estimate |
| 4 | Algebra • Powers of 10 and Exponents | $\checkmark$ | $\checkmark$ | Exponents | 3 | Base-Ten Blocks-Activity 1: Show (Thousands) | Ice Station Exploration, Arctic Algebra, Level U |  |
| 5 | Algebra • Multiplication Patterns | $\checkmark$ | $\checkmark$ | Multiplication Patterns | 4 |  |  | Associative Property of Addition |
| 6 | Multiply by 1-Digit Numbers | $\checkmark$ | $\checkmark$ | Multiply by 1-Digit Numbers | 5 | Base-Ten Blocks-Activity 5: Multiply | The Numbers Games, Up, Up, and Array, Level J |  |
| 7 | Multiply by 2-Digit Numbers | $\checkmark$ | $\checkmark$ | Multiply by 2-Digit Numbers | 6 |  | The Numbers Games, Up, Up, and Array, Level K | Regroup |
| 8 | Relate Multiplication to Division | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 9 | Problem Solving • Multiplication and Division | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 10 | Algebra • Numerical Expressions | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 11 | Algebra • Evaluate Numerical Expressions | $\checkmark$ | $\checkmark$ | Order of Operations | 7 |  | Ice Station Exploration, Arctic Algebra, Levels Q and R |  |
| 12 | Algebra•Grouping Symbols | $\checkmark$ | $\checkmark$ |  |  |  |  |  |

## Chapter 2: Divide Whole Numbers

| Lesson Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Place the First Digit | $\checkmark$ | $\checkmark$ | Place the First Digit | 8 | Base-Ten BlocksActivity 6: Divide | The Number Games, Up, Up, and Array, Levels O and P | Dividend, divisor, quotient, remainder |
| 2 | Divide by 1-Digit Divisors | $\checkmark$ | $\checkmark$ | Divide by 1-Digit Divisors Zeros in Division | $\begin{gathered} 9 \\ 10 \end{gathered}$ | Base-Ten BlocksActivity 6: Divide Base-Ten Blocks-Activity 1: Show (Thousands) |  | Inverse operations |
| 3 | Investigate • Division with 2-Digit Divisors | $\checkmark$ | $\checkmark$ |  |  | Base-Ten BlocksActivity 6: Divide |  | Partial quotients |
| 4 | Partial Quotients | $\checkmark$ | $\checkmark$ |  |  |  | The Number Games, Up, Up, and Array, Level R | Partial quotients |
| 5 | Estimate with 2-Digit Divisors | $\checkmark$ | $\checkmark$ | Division <br> Patterns to <br> Estimate <br> Estimate With Two-Digit Divisors | $\begin{aligned} & 11 \\ & 12 \end{aligned}$ |  |  | Compatible numbers, estimate |
| 6 | Divide by 2-Digit Divisors | $\checkmark$ | $\checkmark$ | Divide by 2-Digit Divisors | 13 |  | The Number Games, Up, Up, and Array, Levels R and S |  |
| 7 | Interpret the Remainder | $\checkmark$ | $\checkmark$ |  |  | Base-Ten BlocksActivity 6: Divide | The Number Games, Up, Up, and Array, Level L |  |
| 8 | Adjust Quotients | $\checkmark$ | $\checkmark$ | Correcting Quotients | 14 |  |  |  |
| 9 | Problem Solving <br> - Division | $\checkmark$ | $\checkmark$ |  |  |  | The Number Games, Up, Up, and Array, Levels R and S |  |

## Chapter 3: Add and Subtract Decimals

| Lesson Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Investigate • Thousandths | $\checkmark$ | $\checkmark$ | Place Value of Decimals | 15 |  |  | Thousandth, hundredth, tenth, place value |
| 2 | Place Value of Decimals | $\checkmark$ | $\checkmark$ |  |  |  | Fraction Action, Number Line Mine, Level M |  |
| 3 | Compare and Order Decimals | $\checkmark$ | $\checkmark$ | Compare and Order Decimals | 16 |  | Fraction Action, Number Line Mine, Levels P and Q |  |
| 4 | Round Decimals | $\checkmark$ | $\checkmark$ |  |  |  | Fraction Action, Number Line Mine, Level R | Round |
| 5 | Investigate • Decimal Addition | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 6 | Investigate Decimal Subtraction | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 7 | Estimate Decimal Sums and Differences | $\checkmark$ | $\checkmark$ | Estimate Sums and Differences | 17 |  |  | Benchmark |
| 8 | Add Decimals | $\checkmark$ | $\checkmark$ |  |  |  | The Number Games, Buggy Bargains, Level E |  |
| 9 | Subtract Decimals | $\checkmark$ | $\checkmark$ | Add and Subtract Decimals | 18 |  |  |  |
| 10 | Algebra • Patterns with Decimals | $\checkmark$ | $\checkmark$ |  |  |  |  | Sequence, term |
| 11 | Problem Solving • Add and Subtract Money | $\checkmark$ | $\checkmark$ |  |  | Measurement-Activity 5: Money (Explore) | The Number Games, Buggy Bargains, Level I |  |
| 12 | Choose a Method | $\checkmark$ | $\checkmark$ |  |  |  |  |  |

## Chapter 4: Multiply Decimals

| Lesson Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Algebra • Multiplication Patterns with Decimals | $\checkmark$ | $\checkmark$ |  |  |  |  | Decimal, hundredths, multiplication, ones, pattern, place value, product, tenths, thousandths |
| 2 | Investigate • Multiply Decimals and Whole Numbers | $\checkmark$ | $\checkmark$ |  |  | Base-Ten BlocksActivity 5: Multiply |  |  |
| 3 | Multiplication with Decimals and Whole Numbers | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 4 | Multiply Using Expanded Form | $\checkmark$ | $\checkmark$ |  |  |  |  | Expanded form |
| 5 | Problem Solving <br> - Multiply Money | $\checkmark$ | $\checkmark$ |  |  |  | The Number Games, Buggy Bargains, Level J |  |
| 6 | Investigate <br> - Decimal Multiplication | $\checkmark$ | $\checkmark$ |  |  |  | The Number Games, Tiny's Think Tank, Level R |  |
| 7 | Multiply Decimals | $\checkmark$ | $\checkmark$ | Multiply Decimals | 19 | Base-Ten BlocksActivity 5: Multiply |  |  |
| 8 | Zeros in the Product | $\checkmark$ | $\checkmark$ |  |  |  |  |  |

## Chapter 5: Divide Decimals

| Lesson <br> Number | Lesson Title | Interactive <br> Student Edition | Math on the <br> Spot Video | Animated Math Models <br> Activity Name |  | Skill Number | iTools | Mega Math |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Chapter 6: Add and Subtract Fractions with Unlike Denominators

| Lesson Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Investigate • Addition with Unlike Denominators | $\checkmark$ | $\checkmark$ |  |  | Fractions-Activity 3: Add (Fraction Bars) | Fraction Action, Fraction Flare Up, Level I | Sum |
| 2 | Investigate • Subtraction with Unlike Denominators | $\checkmark$ | $\checkmark$ | Add and Subtract Fractions with Unlike Denominators | 22 | Fractions-Activity 7: Explore (Fraction Bars) | Fraction Action, Fraction Flare Up, Level J | Difference |
| 3 | Estimate Fraction Sums and Differences | $\checkmark$ | $\checkmark$ | Estimate Sums and Differences | 23 |  | Fraction Action, Number Line Mine, Level K | Benchmark |
| 4 | Common <br> Denominators and Equivalent Fractions | $\checkmark$ | $\checkmark$ |  |  | Number Charts-Activity 1: Hundred Chart (Show Patterns) | Fraction Action, Fraction Flare Up, Level D | Common denominator, common multiples, equivalent fractions |
| 5 | Add and Subtract Fractions | $\checkmark$ | $\checkmark$ | Add and Subtract Unlike Fractions | 24 | Fractions-Activity 3: Add (Fraction Bars) <br> Fractions-Activity 4: <br> Subtract (Fraction Bars) | Fraction Action, Fraction Flare Up, Level K | Simplest form |
| 6 | Add and Subtract Mixed Numbers | $\checkmark$ | $\checkmark$ | Record Addition and Subtraction with Mixed Numbers | 25 |  | The Number Games, Tiny's Think Tank, Level W | Mixed number |
| 7 | Subtraction with Renaming | $\checkmark$ | $\checkmark$ | Subtract Mixed <br> Numbers with Renaming | 26 |  |  |  |
| 8 | Algebra • Patterns with Fractions | $\checkmark$ | $\checkmark$ |  |  | Fractions-Activity 3: Add (Fraction Bars) <br> Fractions-Activity 4: Subtract (Fraction Bars) | Fraction Action, Fraction Flare Up, Level K | Benchmark |
| 9 | Problem Solving Practice Addition and Subtraction | $\checkmark$ | $\checkmark$ |  |  |  | Think Tank, Level W |  |
| 10 | Algebra•Use Properties of Addition | $\checkmark$ | $\checkmark$ |  |  | Fractions-Activity 3: Add (Fraction Bars) | Fraction Action, Fraction Flare Up, Level I |  |

## Chapter 7: Multiply Fractions

| Lesson <br> Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Find Part of a Group | $\checkmark$ | $\checkmark$ |  |  | Fractions-Activity 1: Show (Two-Color Counters) | Fraction Action, Fraction Flare Up, Level C | Denominator, numerator, product |
| 2 | Investigate • Multiply Fractions and Whole Numbers | $\checkmark$ | $\checkmark$ | Multiply Fractions and Whole Numbers | 27 | Fractions-Activity 7: Explore (Fraction Circles) |  |  |
| 3 | Fraction and Whole Number Multiplication | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 4 | Investigate • Multiply Fractions | $\checkmark$ | $\checkmark$ | Multiply a Fraction by a Fraction | 28 | Fractions-Activity 5: Multiply | Fraction Action, Fraction Flare Up, Level O | Equivalent fraction |
| 5 | Compare Fraction Factors and Products | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 6 | Fraction Multiplication | $\checkmark$ | $\checkmark$ | Multiply Fractions and Whole Numbers <br> Multiply a Fraction by a Fraction | $\begin{aligned} & 27 \\ & 28 \end{aligned}$ |  | Fraction Action, Fraction Flare Up, Level O | Simplest form |
| 7 | Investigate • Area and Mixed Numbers | $\checkmark$ | $\checkmark$ |  |  |  |  | Mixed number |
| 8 | Compare Mixed Number Factors and Products | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 9 | Multiply Mixed Numbers | $\checkmark$ | $\checkmark$ |  |  | Fractions-Activity 5: Multiply |  |  |
| 10 | Problem Solving <br> - Find Unknown Lengths | $\checkmark$ | $\checkmark$ |  |  |  |  |  |

## Chapter 8: Divide Fractions

| Lesson <br> Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Investigate • Divide <br> Fractions and <br> Whole Numbers | $\checkmark$ | $\checkmark$ | Divide Whole Numbers by Fractions | 29 | Fractions-Activity 7: <br> Explore (Fraction Bars) | Fraction Action, Fraction Flare Up, Level P | Dividend, fraction, quotient, whole number |
| 2 | Problem Solving • Use Multiplication | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 3 | Connect Fractions to Division | $\checkmark$ | $\checkmark$ |  |  |  | Fraction Action, Fraction Flare Up, Level E |  |
| 4 | Fraction and Whole-Number Division | $\checkmark$ | $\checkmark$ | Divide Whole Numbers by Fractions | 29 |  | Fraction Action, Fraction Flare Up, Level P |  |
| 5 | Interpret Division with Fractions | $\checkmark$ | $\checkmark$ |  |  |  |  | Equation |

## Chapter 9: Algebra: Patterns and Graphing

| Lesson Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Line Plots | $\checkmark$ | $\checkmark$ |  |  | Graphs-Activity 6: Line Plot |  | Data, line plot |
| 2 | Ordered Pairs | $\checkmark$ | $\checkmark$ | Graph Ordered Pairs <br> Use a Coordinate Grid | $\begin{aligned} & 30 \\ & 31 \end{aligned}$ | Algebra-Activity 3: Coordinate Grids and Coordinate Planes (Points on a Grid) | The Number Games, ArachnaGraph, Level H | Ordered pair, origin, $x$-axis, $x$-coordinate $y$-axis, $y$-coordinate |
| 3 | Investigate • Graph Data | $\checkmark$ | $\checkmark$ |  |  |  |  | Degree Fahrenheit ( ${ }^{\circ}$ F) |
| 4 | Line Graphs | $\checkmark$ | $\checkmark$ | Interpret Line Graphs | 32 | Graphs-Activity 5: Line Graph (Basic) | The Number Games, ArachnaGraph, Level I <br> The Number Games, ArachnaGraph, Level J | Line graph, scale, interval |
| 5 | Numerical Patterns | $\checkmark$ | $\checkmark$ |  |  | Number Lines-Activity 3: Skip Count |  |  |
| 6 | Problem Solving • Find a Rule | $\checkmark$ | $\checkmark$ |  |  | Algebra-Activity 4: Algebra Tiles (Add) and (Subtract) | Ice Station Exploration, Arctic Algebra, LevelsJ and K |  |
| 7 | Graph and Analyze Relationships | $\checkmark$ | $\checkmark$ | Graph Ordered Pairs <br> Use a Coordinate Grid | $\begin{aligned} & 30 \\ & 31 \end{aligned}$ | Algebra-Activity 3: Coordinate Grids and Coordinate Planes (Points on a Grid) | The Number Games, ArachnaGraph, Level H |  |

## Chapter 10: Convert Units of Measure

| Lesson <br> Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Customary Length | $\checkmark$ | $\checkmark$ | Change Linear Units | 33 | Measurement-Activity 2: Equivalent Measures (Length) | The Number Games, Tiny's Think Tank, Level M | Foot, inch, mile, yard |
| 2 | Customary Capacity | $\checkmark$ | $\checkmark$ | Customary Capacity | 34 | Measurement-Activity 2: Equivalent Measures (Capacity) | The Number Games, Tiny's Think Tank, Level N | Capacity, cup, fluid ounce, gallon, pint, quart |
| 3 | Weight | $\checkmark$ | $\checkmark$ | Customary Weight | 35 | Measurement-Activity 2: Equivalent Measures (Weight/Mass) | The Number Games, Tiny's Think Tank, Level O | Ounce, pound, ton, weight |
| 4 | Multistep Measurement Problems | $\checkmark$ | $\checkmark$ | Change Linear Units <br> Customary Capacity Customary Weight | $\begin{aligned} & 33 \\ & 34 \\ & 35 \end{aligned}$ | Measurement-Activity 2: Equivalent Measures (Capacity), (Length), and (Weight/Mass) | The Number Games, Tiny's Think Tank, Levels M, N and O |  |
| 5 | Metric <br> Measures | $\checkmark$ | $\checkmark$ | Metric Capacity <br> Mass | $\begin{aligned} & 36 \\ & 37 \end{aligned}$ |  | The Number Games, Tiny's Think Tank, Level Q | Dekameter, centimeter, decimeter, gram, kilogram, kilometer, liter, mass, meter, milligram, milliliter, millimeter |
| 6 | Problem <br> Solving • <br> Customary and Metric <br> Conversions | $\checkmark$ | $\checkmark$ | Change Linear Units Customary Capacity | $\begin{aligned} & 33 \\ & 34 \end{aligned}$ | Number Charts-Activity 3: Multiplication Chart | The Number Games, Tiny's Think Tank, Levels I, M, and $N$ |  |
| 7 | Elapsed Time | $\checkmark$ | $\checkmark$ | Change Units of Time <br> Elapsed Time on a Clock | $\begin{aligned} & 38 \\ & 39 \end{aligned}$ | Measurement-Activity 3: Clocks (Elapsed Time) | The Number Games, Tiny's Think Tank, Level D Country Countdown, Clock-a- Doodle-Doo, Level K | Elapsed time |

## Chapter 11: Geometry and Volume

| Lesson <br> Number | Lesson Title | Interactive Student Edition | Math on the Spot Video | Animated Math Models |  | iTools | Mega Math | Vocabulary |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Activity Name | Skill Number |  |  |  |
| 1 | Polygons | $\checkmark$ | $\checkmark$ | Polygons | 40 | Geometry-Activity 2: <br> Plane Figures (Sides and Vertices) <br> Geometry-Activity 5: Draw (Polygons) | Ice Station Exploration, Polar Planes, Level D | Congruent, polygon, regular polygon, heptagon, nonagon, decagon, hexagon, octagon, pentagon, quadrilateral |
| 2 | Triangles | $\checkmark$ | $\checkmark$ | Classify Triangles | 41 | Geometry-Activity 5: Draw (Polygons) | Ice Station <br> Exploration, Polar Planes, Levels E and $F$ | Equilateral triangle, isosceles triangle, scalene triangle, acute triangle, obtuse triangle, right triangle |
| 3 | Quadrilaterals | $\checkmark$ | $\checkmark$ | Classify Quadrilaterals | 42 |  | Ice Station Exploration, Polar Planes, Level G | Parallel lines, parallelogram, perpendicular lines, rectangle, rhombus, trapezoid |
| 4 | Problem Solving • Properties of TwoDimensional Figures | $\checkmark$ | $\checkmark$ |  |  | Geometry-Activity 2: <br> Plane Figures (Congruent) |  | Base, decagonal prism, hexagonal prism, lateral face, octagonal prism, pentagonal prism, pentagonal pyramid, polyhedron, prism, pyramid |
| 5 | Three-Dimensional Figures | $\checkmark$ | $\checkmark$ | Solid Figures | 43 | Geometry-Activity 1: <br> Solid Figures (Different Views) <br> Geometry-Activity 6: <br> Explore (Plain and Solid Figures) | Ice Station Exploration, Frozen Solids, Levels A and K | Unit cube |
| 6 | Investigate • Unit Cubes and Solid Figures | $\checkmark$ | $\checkmark$ |  |  |  |  | Cubic unit, volume |
| 7 | Investigate • Understand Volume | $\checkmark$ | $\checkmark$ |  |  | Geometry—Activity 3: Area and Perimeter (Rectangle) | Shapes Ahoy, Undersea 3D, Level H |  |
| 8 | Investigate • Estimate Volume | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 9 | Volume of Rectangular Prisms | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 10 | Algebra • Apply Volume Formulas | $\checkmark$ | $\checkmark$ | Find Volume | 44 |  | Ice Station Exploration, Frozen Solids, Level J |  |
| 11 | Problem Solving • Compare Volumes | $\checkmark$ | $\checkmark$ |  |  |  |  |  |
| 12 | Find Volume of Composed Figures | $\checkmark$ | $\checkmark$ |  |  |  |  |  |

GO Math! Grade 5

## NOTES

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