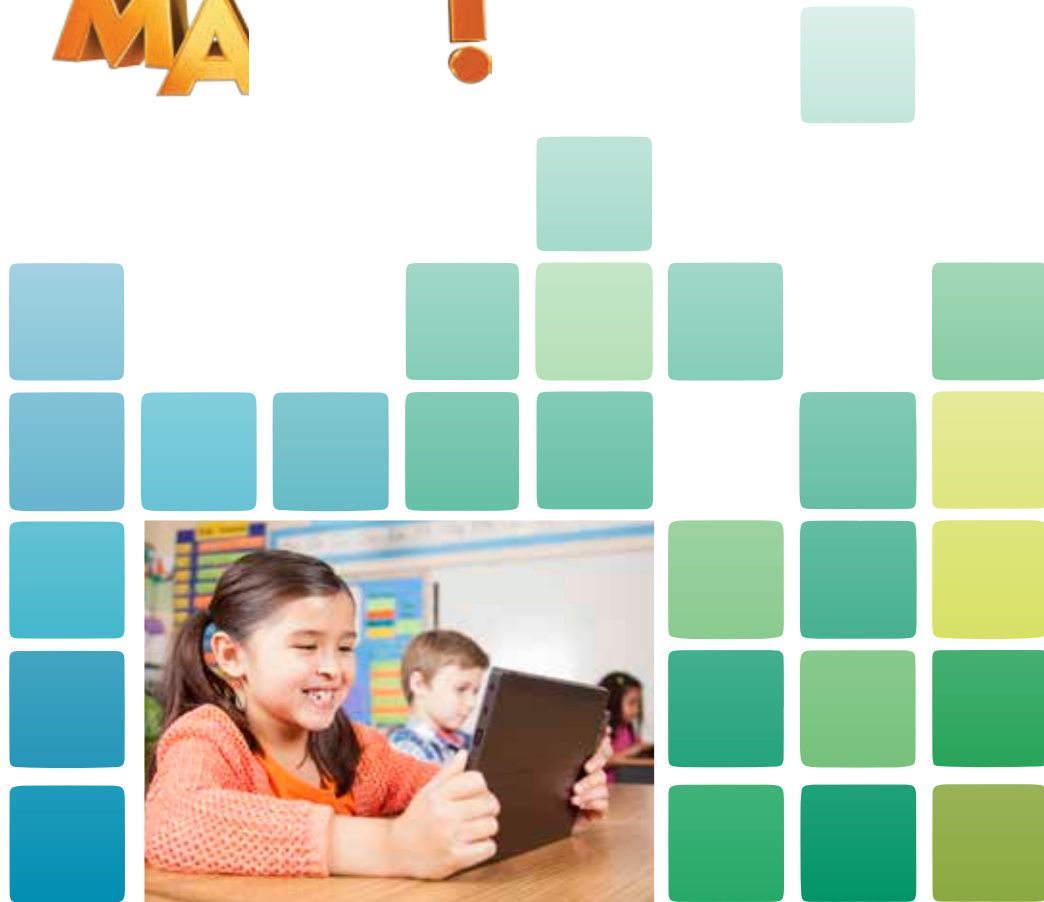




Parent's Guide to *GO Math!* Technology Correlation



Not sure how to help your child with homework? Looking for extra practice to help your child succeed? **GO Math!**[®] Grade 4 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**[®] Powered by Knewton[™].

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.

**These online resources require Flash[®].*

Chapter 1: Place Value, Addition, and Subtraction to One Million

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		iTools	Mega Math	Vocabulary
				Activity Name	Skill Number			
1	Model Place Value Relationships	✓	✓			Base-Ten Blocks—Activity 1: Show (Thousands) Base-Ten Blocks—Activity 1: Show (Explore)	The Numbers Games, Tiny's Think Tank, Level A	Digit, place value
2	Read and Write Numbers	✓	✓					Expanded form, period, standard form, word form, sum
3	Compare and Order Numbers	✓	✓	Compare Whole Numbers Order Whole Numbers	1 2	Base-Ten Blocks—Activity 2: Compare	Country Countdown, Harrison's Comparisons, Level M Numberopolis, Cross Town Number Line, Level V	Compare, equal sign, greater than sign, less than sign, number line, order
4	Round Numbers	✓	✓	Round Numbers	3		Fraction Action, Number Line Mine, Level C	Estimate, round
5	Investigate • Rename Numbers	✓	✓			Base-Ten Blocks—Activity 1: Show (Thousands)		Regroup
6	Add Whole Numbers	✓	✓			Base-Ten Blocks—Activity 3: Add (Hundreds)	Country Countdown, Block Busters Level V The Numbers Games, Tiny's Think Tank, Level B	Addend
7	Subtract Whole Numbers	✓	✓	Add and Subtract up to 4 Digits	4	Base-Ten Blocks—Activity 4: Subtract (Hundreds)	Country Countdown, Block Busters Level Y The Numbers Games, Tiny's Think Tank, Level C	Addition, difference
8	Problem Solving • Comparison Problems with Addition and Subtraction	✓	✓					

Chapter 2: Multiply by 1-Digit 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	Algebra • Multiplication Comparisons	✓	✓			Counters—Activity 5: Multiply		
2	Algebra • Comparison Problems	✓	✓			Counters—Activity 4: Subtract Counters—Activity 5: Multiply	Numberopolis; Carnival Stories, Level O	
3	Multiply Tens, Hundreds, and Thousands	✓	✓	Multiples of 10, 100, and 1,000	5	Number Charts—Activity 1: Hundred Chart (Number Pattern) Base-Ten Blocks—Activity 5: Multiply Number Lines—Activity 4: Multiply		Factor, multiply, number line, place value, product
4	Estimate Products	✓	✓	Estimate Products Mental Math: Estimate Products	6 7	Number Lines—Activity 5: Explore		Estimate, round
5	Investigate • Multiply Using the Distributive Property	✓	✓	Multiplication Properties	8	Base-Ten Blocks—Activity 5: Multiply		Distributive Property, partial product
6	Multiply Using Expanded Form	✓	✓			Base-Ten Blocks—Activity 1: Show (Explore)		Expanded form
7	Multiply Using Partial Products	✓	✓			Base-Ten Blocks—Activity 5: Multiply		
8	Multiply Using Mental Math	✓	✓	Multiplication Properties	8	Measurement—Activity 5: Money (Show Amounts)		Associative Property of Multiplication
9	Problem Solving • Multistep Multiplication Problems	✓	✓					
10	Multiply 2-Digit Numbers with Regrouping	✓	✓	Multiply 2-Digit by 1-Digit Numbers	9	Base-Ten Blocks—Activity 5: Multiply	The Number Games, Up, Up, and Array, Level J	Regroup
11	Multiply 3-Digit and 4-Digit Numbers with Regrouping	✓	✓	Multiply 3-Digit Numbers	10			
12	Algebra • Solve Multistep Problems Using Equations	✓	✓				Ice Station Exploration, Arctic Algebra, Level Q	

Chapter 3: Multiply 2-Digit 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	Multiply by Tens	✓	✓	Multiply by Tens	11	Number Charts—Activity 3: Multiplication Chart Base-Ten Blocks—Activity 5: Multiply Number Lines—Activity 4: Multiply	The Number Games, Up, Up, and Array, Levels C and I	Associative Property of Multiplication, factor, place value, product
2	Estimate Products	✓	✓	Mental Math: Estimate Products	7	Base-Ten Blocks—Activity 5: Multiply Number Lines—Activity 5: Explore		Compatible numbers, estimate, round
3	Investigate • Area Models and Partial Products	✓	✓			Base-Ten Blocks—Activity 5: Multiply Number Charts—Activity 3: Multiplication Chart		Partial product
4	Multiply Using Partial Products	✓	✓			Base-Ten Blocks—Activity 5: Multiply		
5	Multiply with Regrouping	✓	✓	Multiply by 2-Digit Numbers	12	Base-Ten Blocks—Activity 5: Multiply	The Number Games, Up, Up, and Array, Level K	Commutative Property of Multiplication, regroup
6	Choose a Multiplication Method	✓	✓			Number Charts—Activity 3: Multiplication Chart		
7	Problem Solving • Multiply 2-Digit Numbers	✓	✓			Base-Ten Blocks—Activity 5: Multiply Base-Ten Blocks—Activity 4: Subtract (Ones)		

Chapter 4: Divide by 1-Digit 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	Estimate Quotients Using Multiples	✓	✓			Number Charts—Activity 1: Hundred Chart (Add)		Multiple, counting number, factor, multiplication, product
2	Investigate • Remainders	✓	✓	Model Division With Remainders	13	Counters—Activity 6: Divide	The Number Games, Up, Up, and Array, Level L	Remainder, divide, dividend, division, divisor, quotient
3	Interpret the Remainder	✓	✓					
4	Divide Tens, Hundreds, and Thousands	✓	✓	Division Patterns	14			Hundreds, ones, place value, tens, thousands
5	Estimate Quotients Using Compatible Numbers	✓	✓	Estimate With 1-Digit Divisors	15	Number Charts—Activity 3: Multiplication Chart		Compatible numbers
6	Investigate • Division and the Distributive Property	✓	✓			Base-Ten Blocks—Activity 6: Divide		Distributive Property
7	Investigate • Divide Using Repeated Subtraction	✓	✓	Relate Division and Subtraction	16	Counters—Activity 4: Subtract		
8	Divide Using Partial Quotients	✓	✓					Partial quotient
9	Investigate • Model Division with Regrouping	✓	✓			Base-Ten Blocks—Activity 6: Divide Counters—Activity 6: Divide		
10	Place the First Digit	✓	✓	Place the First Digit	17	Base-Ten Blocks—Activity 6: Divide	The Number Games, Up, Up, and Array, Levels M and N	
11	Divide by 1-Digit Numbers	✓	✓	Divide by 1-Digit Divisors Zeros in Division	18 19	Algebra—Activity 2: Input/Output Table	The Number Games, Up, Up, and Array, Levels O and P	
12	Problem Solving • Multistep Division Problems	✓	✓					

Chapter 5: Factors, Multiples, and Patterns

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		iTools	Mega Math	Vocabulary
				Activity Name	Skill Number			
1	Model Factors	✓	✓	Factors and Multiples	20	Counters—Activity 1: Count (Counters) Number Charts—Activity 3: Multiplication Chart		Factor, array, product
2	Factors and Divisibility	✓	✓			Number Charts—Activity 3: Multiplication Chart	Ice Station Exploration, Arctic Algebra, Levels M and N	Divisible
3	Problem Solving • Common Factors	✓	✓					Common factor
4	Factors and Multiples	✓	✓	Factors and Multiples	20	Numbers Charts—Activity 1: Hundred Chart (Number Patterns)	Ice Station Exploration, Arctic Algebra, Levels M and N	Common multiple, multiple
5	Prime and Composite Numbers	✓	✓	Prime and Composite Numbers	21	Counters—Activity 6: Divide Numbers Charts—Activity 1: Hundred Chart (Number Patterns)		Composite number, prime number
6	Algebra • Number Patterns	✓	✓	Number Patterns	22		The Numbers Games, Tiny's Think Tank, Level K	Pattern, term

Chapter 6: Fraction Equivalence and Comparison

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 • Equivalent Fractions	✓	✓			Fractions—Activity 2: Compare (Fraction Bars) Fractions—Activity 2: Compare (Fraction Circles) Fractions—Activity 1: Show (Fraction Circles)	Fraction Action, Fraction Flare Up, Level D Fraction Action, Number Line Mine, Level E	Equivalent fractions, denominator, fraction, numerator
2	Generate Equivalent Fractions	✓	✓	Equivalent Fractions	23	Fractions—Activity 2: Compare (Fraction Bars) Fractions—Activity 2: Compare (Fraction Circles)		
3	Simplest Form	✓	✓	Simplest Form	24	Fractions—Activity 7: Explore (Fraction Bars)	Fraction Action, Fraction Flare Up, Level E	Simplest form, common factor, denominator, equivalent fractions, factor, numerator
4	Common Denominators	✓	✓			Fractions—Activity 7: Explore (Fraction Circles)		Common denominator, common multiple, multiple
5	Problem Solving • Find Equivalent Fractions	✓	✓	Equivalent Fractions	23		Fraction Action, Fraction Flare Up, Level D Fraction Action, Number Line Mine, Level E	
6	Compare Fractions Using Benchmarks	✓	✓	Compare Fractions	25	Fractions—Activity 2: Compare (Fraction Bars) Fractions—Activity 2: Compare (Fraction Circles)	Shapes Ahoy! Ship Shapes, Level V Fraction Action, Fraction Flare Up, Level F	Benchmark
7	Compare Fractions	✓	✓				Fraction Action, Number Line Mine, Level I	Common denominator, common numerator
8	Compare and Order Fractions	✓	✓	Compare and Order Fractions	26	Number Lines—Activity 5: Explore	Fraction Action, Fraction Flare Up, Level F Fraction Action, Number Line Mine, Level I	

Chapter 7: Add and Subtract Fractions

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 • Add and Subtract Parts of a Whole	✓	✓			Fractions—Activity 1: Show (Fraction Circles) Fractions—Activity 7: Explore (Fraction Bars) Fractions—Activity 7: Explore (Fraction Circles)		Fraction
2	Write Fractions as Sums	✓	✓			Fractions—Activity 1: Show (Fraction Bars) Fractions—Activity 1: Show (Fraction Circles)		Unit fraction, denominator, numerator
3	Add Fractions Using Models	✓	✓	Add Like Fractions	27	Fractions—Activity 1: Show (Fraction Bars) Fractions—Activity 3: Add (Fraction Bars)	Fraction Action, Fraction Flare Up, Level G	
4	Subtract Fractions Using Models	✓	✓	Subtract Like Fractions	28	Fractions—Activity 4: Subtract (Fraction Bars) Fractions—Activity 4: Subtract (Fraction Circles)	Fraction Action, Fraction Flare Up, Level H	
5	Add and Subtract Fractions	✓	✓	Add and Subtract Like Fractions	29	Fractions—Activity 3: Add (Fraction Bars) Fractions—Activity 4: Subtract (Fraction Bars)	Fraction Action, Fraction Flare Up, Levels G and H	
6	Rename Fractions and Mixed Numbers	✓	✓	Rename Fractions and Mixed Numbers	30	Fractions—Activity 7: Explore (Fraction Bars)	Fraction Action, Number Line Mine, Level F	Mixed number, simplest form
7	Add and Subtract Mixed Numbers	✓	✓	Add and Subtract Mixed Numbers	31	Fractions—Activity 7: Explore (Fraction Circles)		
8	Subtraction with Renaming	✓	✓	Subtraction with Renaming	32	Fractions—Activity 7: Explore (Fraction Bars)		
9	Algebra • Fractions and Properties of Addition	✓	✓					Associative Property of Addition, Commutative Property of Addition
10	Problem Solving • Multistep Fraction Problems	✓	✓			Fractions—Activity 7: Explore (Fraction Circles)		

Chapter 8: Multiply Fractions by 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	Multiples of Unit Fractions	✓	✓			Fractions—Activity 1: Show (Fraction Bars) Fractions—Activity 1: Show (Fraction Circles)	Shapes Ahoy, Ship Shapes, Levels R and S Fraction Action, Fraction Flare Up, Levels A and B	Fraction, multiple, product, unit fraction
2	Multiples of Fractions	✓	✓					
3	Multiply a Fraction by a Whole Number Using Models	✓	✓	Multiply Fractions and Whole Numbers	33			
4	Multiply a Fraction or Mixed Number by a Whole Number	✓	✓	Multiply Fractions and Whole Numbers	33		Fraction Action, Number Line Mine, Levels F and L	Identity Property of Multiplication
5	Problem Solving • Comparison Problems with Fractions	✓	✓					Fractions—Activity 1: Show (Fraction Bars)

Chapter 9: Relate Fractions and 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	Relate Tenths and Decimals	✓	✓	Model Tenths	34	Number Lines—Activity 5: Explore		Decimal, decimal point, tenth, compare, fraction, place value, whole
2	Relate Hundredths and Decimals	✓	✓	Model Hundredths	35		Fraction Action, Fraction Flare Up, Level L Fraction Action, Number Line Mine, Level N	Hundredth
3	Equivalent Fractions and Decimals	✓	✓	Equivalent Decimals	36		Fraction Action, Fraction Flare Up, Level M	Equivalent decimals, Equivalent fractions
4	Relate Fractions, Decimals, and Money	✓	✓	Relate Fractions, Decimals, and Money	37	Measurement—Activity 5: Money (Show Amounts) Measurement—Activity 5: Money (Explore)	Fraction Action, Number Line Mine, Level N	
5	Problem Solving • Money	✓	✓					
6	Add Fractional Parts of 10 and 100	✓	✓					
7	Compare Decimals	✓	✓			Fractions—Activity 2: Compare (Fraction Bars) Number Lines—Activity 5: Explore	Fraction Action, Number Line Mine, Level P	

Chapter 10: Two-Dimensional Figures

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		iTools	Mega Math	Vocabulary
				Activity Name	Skill Number			
1	Lines, Rays, and Angles	✓	✓	Points, Lines, and Rays	38	Geometry—Activity 5: Draw (Segments, Lines, and Rays) Geometry—Activity 5: Draw (Angles)	Ice Station Exploration, Polar Planes, Level B	Acute angle, angle, line, line segment, obtuse angle, point, ray, right angle, straight angle
				Classify Angles	39			
2	Classify Triangles	✓	✓			Geometry—Activity 5: Draw (Polygons)		Acute triangle, obtuse triangle, right triangle, polygon, triangle, Venn diagram
3	Parallel Lines and Perpendicular Lines	✓	✓	Types of Lines	40	Geometry—Activity 5: Draw (Segments, Lines, and Rays)	Ice Station Exploration, Polar Planes, Level C	Intersecting lines, parallel lines, perpendicular lines
4	Classify Quadrilaterals	✓	✓	Quadrilaterals	41	Geometry—Activity 5: Draw (Polygons) Geometry—Activity 6: Explore (Plane and Solid Figures)	Ice Station Exploration, Polar Planes, Level G	Parallelogram, rectangle, rhombus, square, trapezoid, quadrilateral
5	Line Symmetry	✓	✓	Symmetry	42	Geometry—Activity 2: Plane Figures (Symmetry)	Ice Station Exploration, Polar Planes, Levels J and K	Line of symmetry, line symmetry, diagonal, horizontal, vertical
6	Find and Draw Lines of Symmetry	✓	✓				Shapes Ahoy!, Ship Shapes, Levels M and N	Hexagon, regular polygon
7	Problem Solving • Shape Patterns	✓	✓	Geometric Patterns	43	Counters—Activity 8: Explore (Make Patterns)	Shapes Ahoy, Ship Shapes, Level B The Numbers Games, Tiny’s Think Tank, Levels J and U	

Chapter 11: Angles

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 • Angles and Fractional Parts of a Circle	✓	✓			Geometry—Activity 5: Draw (Segments, Lines, and Rays) Fractions—Activity 7: Explore (Fraction Circles)		Clockwise, counterclockwise, angle, circle, ray, vertex
2	Degrees	✓	✓			Geometry—Activity 5: Draw (Angles) Fractions—Activity 7: Explore (Fraction Circles)		Degree $^{\circ}$, acute angle, obtuse angle, right angle, straight angle
3	Measure and Draw Angles	✓	✓	Measure and Classify Angles	44	Geometry—Activity 5: Draw (Angles)		Protractor
4	Investigate • Join and Separate Angles	✓	✓					
5	Problem Solving • Unknown Angle Measures	✓	✓					

Chapter 12: Relative Sizes of Measurement Units

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		iTools	Mega Math	Vocabulary
				Activity Name	Skill Number			
1	Measurement Benchmarks	✓	✓				Ice Station Exploration, Linear Lab, Levels E and I	Kilometer, mile, benchmark
2	Customary Units of Length	✓	✓	Length	45	Measurement—Activity 2: Equivalent Measures (Length)	Ice Station Exploration, Linear Lab, Level E Shapes Ahoy! Made to Measure, Level J The Numbers Games, Tiny's Think Tank, Level M	Foot, inch, weight, yard
3	Customary Units of Weight	✓	✓	Customary Weight	46	Measurement—Activity 2: Equivalent Measures (Weight/Mass) Measurement—Activity 1: Balance and Scale (Balance)	The Numbers Games, Tiny's Think Tank, Level O	Ounce, pound, ton
4	Customary Units of Liquid Volume	✓	✓	Customary Capacity	47	Measurement—Activity 2: Equivalent Measures (Capacity)	The Numbers Games, Tiny's Think Tank, Level N	Cup, fluid ounce, gallon, half gallon, liquid volume, pint, quart
5	Line Plots	✓	✓			Graphs—Activity 6: Line Plot	The Numbers Games, ArachnaGraph, Levels E and F	Line plot
6	Investigate • Metric Units of Length	✓	✓	Metric Length Change Metric Linear Units	48 49		Ice Station Exploration, Linear Lab, Levels H, I, and J Shapes Ahoy!, Made to Measure, Level I	Decimeter, millimeter, centimeter, kilometer, meter
7	Metric Units of Mass and Liquid Volume	✓	✓	Mass Metric Capacity	50 51		The Numbers Games, Tiny's Think Tank, Level Q	Millileter, gram, kilogram, liter
8	Units of Time	✓	✓	Change Units of Time	52	Measurement—Activity 3: Clocks (Time on a Clock)		Second, day, hour, minute, month, week, year
9	Problem Solving • Elapsed Time	✓	✓	Elapsed Time on a Clock	53	Measurement—Activity 3: Clocks (Elapsed Time)	The Numbers Games, Tiny's Think Tank, Level D Country Countdown, Clock-a-Doodle-Do, Level K	A.M., elapsed time, P.M.
10	Mixed Measures	✓	✓			Measurement—Activity 2: Equivalent Measures (Capacity) Measurement—Activity 2: Equivalent Measures (Weight/Mass) Measurement—Activity 2: Equivalent Measures (Length)	The Numbers Games, Tiny's Think Tank, Levels M, N, and O	
11	Algebra: Patterns in Measurement Units	✓	✓			Measurement—Activity 2: Equivalent Measures (Length)		

Chapter 13: Algebra: Perimeter and Area

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		iTools	Mega Math	Vocabulary
				Activity Name	Skill Number			
1	Perimeter	✓	✓	Find Perimeter	54		Ice Station Exploration, Polar Planes, Level P	Formula, perimeter, centimeter, foot, inch, length, meter, width, yard
2	Area	✓	✓	Area of Plane Figures	55	Geometry—Activity 3: Area and Perimeter (Rectangle) Geometry—Activity 3: Area and Perimeter (Explore)	Ice Station Exploration, Polar Planes, Level Q	Area, base, height, square unit
				Use a Formula to Find Area	56			
				Find Area	57			
3	Area of Combined Rectangles	✓	✓	Perimeter and Area of Complex Figures	58	Geometry—Activity 3: Area and Perimeter (Explore)	Ice Station Exploration, Polar Planes, Level R Shapes Ahoy, Ship Shapes, Level X	
4	Find Unknown Measures	✓	✓			Geometry—Activity 3: Area and Perimeter (Rectangle)		Kilometer, mile
5	Problem Solving • Find the Area	✓	✓					

GO MATH!

Connect with us:



Flash® is a registered trademark of Adobe Systems Incorporated in the United States and/or other countries. Knewton™ is a trademark of Knewton, Inc. Houghton Mifflin Harcourt™, HMH®, Personal Math Trainer® and design, and GO Math!® are trademarks or registered trademarks of Houghton Mifflin Harcourt. © Houghton Mifflin Harcourt. All rights reserved. Printed in the U.S.A. 08/16 MS181523

hmhco.com • 800.225.5425



hmhco.com/gomath