

6

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



Grade 3

Not sure how to help your child with homework? Looking for extra practice to help your child succeed? **GO Math!**<sup>®</sup> Grade 3 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**<sup>®</sup> Powered by Knewton<sup>™</sup>.

### 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**<sup>\*</sup>

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.

Lesson		Interactive	Math on the	Animated M	ath Models			
Number	Lesson Title	<b>Student Edition</b>	Spot Video	Activity Name	Skill Number	iTools	Mega Math	Vocabulary
1	Algebra • Number Patterns	V	v			Number Charts— Activity 1: Hundred Chart (Show Patterns)	Country Countdown, Block Busters, Level C	Pattern, Identity Property of Addition, Commutative Property of Addition, even, odd
2	Round to the Nearest Ten or Hundred	V	V	Round to Nearest Ten, Hundred, and Thousand	1		Numberopolis, Cross Town Number Line, Level U Fraction Action, Number Line Mine, Level C	Round
3	Estimate Sums	~	V	Estimate Sums	2			Estimate, compatible numbers
4	Mental Math Strategies for Addition	~	V			Number Lines— Activity 5: Explore		
5	Algebra • Use Properties to Add	~	v					Associative Property of Addition
6	Use the Break Apart Strategy to Add	~	v			Base-Ten Blocks—	Country Countriling Directo	
7	Use Place Value to Add	V	V	Addition With Regrouping Up To 3-Digits	3	Activity 3: Add (Hundreds)	Country Countdown, Block Busters, Levels U and V	Regroup
8	Estimate Differences	~	V	Estimate Differences	4			
9	Mental Math Strategies for Subtraction	V	V			Number Lines— Activity 5: Explore		
10	Use Place Value to Subtract	~	V	Subtract 3-Digit Numbers	5	Base-Ten Blocks—	Country Countdown, Block Busters, Levels X and Y	
11	Combine Place Values to Subtract	V	v			Activity 4: Subtract (Hundreds)		
12	Problem Solving • Model Addition and Subtraction	V	~					

Lesson		Interactive	Math on the	Animated M	lath Models	· 1		
Number	Lesson Title	Student Edition	Spot Video	Activity Name	Skill Number	iTools	Mega Math	Vocabulary
1	Problem Solving • Organize Data	V	r	Collect Data	6			Frequency table, data, tally table
2	Use Picture Graphs	v	v			Graphs—Activity 4: Pictograph	The Number Games, ArachnaGraph, Level A Country Countdown, White Water Graphing, Levels C and E	Key, picture graph
3	Make Picture Graphs	V	v	Pictographs	7		Country Countdown, White Water Graphing, Level D	Experiment, survey
4	Use Bar Graphs	V	v	Read a Bar Graph	8		The Number Games, ArachnaGraph, Level B	Bar graph, scale, horizontal bar graph, vertical bar graph
5	Make Bar Graphs	V	v	Make and Interpret Bar Graphs	9	Graphs—Activity 1: Bar Graph (Basic)	Country Countdown, White Water Graphing, Level F The Number Games, ArachnaGraph, Level C	
6	Solve Problems Using Data	V	V				The Number Games, ArachnaGraph, Level B	Skip count
7	Use and Make Line Plots	V	V			Graphs—Activity 5: Line Plot	The Number Games, ArachnaGraph, Level E	Line plot

Lesson	Lesson Title	Interactive	Math on the	Animated M	ath Models	iTools	Mega Math	Vocabulary
Number	Lesson nue	Student Edition	Spot Video	Activity Name	Skill Number	TIOOIS	MegaMath	vocabulary
1	Count Equal Groups	V	V	Algebra: Relate Addition and Multiplication	10	Counters—Activity 5: Multiply Number Lines—Activity 3: Skip Count Number Lines—Activity 4: Multiply	Country Countdown, Counting Critters, Level V Numberopolis, Carnival Stories, Level S	Equal groups
2	Algebra • Relate Addition and Multiplication	v	v			Counters—Activity 5: Multiply Number Lines—Activity 4: Multiply	Country Countdown, Counting Critters, Level V	Multiply, factor, product, addition
3	Skip Count on a Number Line	V	v	Multiply with 3	11	Number Lines—Activity 4: Multiply Number Lines—Activity 5: Explore	Numberopolis, Cross Town Number Line, Levels K, Q, & R	
4	Problem Solving • Model Multiplication	v	V			Counters—Activity 5: Multiply		
5	Model with Arrays	~	V				Country Countdown, Counting Critters,	Array
6	Algebra • Commutative Property of Multiplication	~	٧	Algebra: Model with Arrays	12	Number Charts—Activity 3: Multiplication Chart	Level W	Commutative Property of Multiplication
7	Algebra • Multiply with 1 and 0	V	v	Multiply with 1 and 0	13	Number Lines—Activity 4: Multiply	The Number Games, Up, Up, and Array, Levels A and C	Identity Property of Multiplication Zero Property of Multiplication

		<b></b>
Chanter 4. Multi	olication Facts and S	stratedies

Lesson	Lesson Title	Interactive	Math on the	Animated Ma	ath Models	iTools	Mega Math	Vocabulary
Number	Lesson Title	Student Edition	Spot Video	Activity Name	Skill Number	TIOOIS	mega math	vocabulary
1	Multiply with 2 and 4	V	V	Multiplication with 0, 1, 2, and 4	14	Base-Ten Blocks—Activity 5: Multiply Counters—Activity 5: Multiply Number Lines—Activity 4: Multiply		factor, product
2	Multiply with 5 and 10	~	v	Multiply with 2 and 5	15	Counters—Activity 5: Multiply Number Lines—Activity 4: Multiply	Country Countdown, Counting Critters, Level Z The Number Games, Up, Up, and Array, Levels A and I Numberopolis, Carnival Stories, Level S	Multiple
3	Multiply with 3 and 6	v	v	Multiply with 3, 5, 6, and 10	16	Counters—Activity 5: Multiply Number Lines—Activity 4: Multiply Number Charts—Activity 3: Multiplication Chart	The Number Games, Up, Up, and Array, Level A Numberopolis, Carnival Stories, Level S	
4	Algebra • Distributive Property	~	v				Country Countdown, Counting Critters, Level W	Distributive Property, addend, sum
5	Multiply with 7	V	v			Base-Ten Blocks—Activity 5: Multiply Counters—Activity 5: Multiply		Commutative Property of Multiplication
6	Algebra • Associative Property of Multiplication	V	v	Algebra: Multiply 3 Factors	17			Associative Property of Multiplication
7	Algebra • Patterns on the Multiplication Table	V	V			Number Charts—Activity 3: Multiplication Chart		Even, odd
8	Multiply with 8	~	v			Counters—Activity 5: Multiply Number Lines—Activity 4: Multiply	The Number Games, Up, Up, and Array, Level B	
9	Multiply with 9	~	V	Multiply with 7, 8, and 9	18	Base-Ten Blocks—Activity 5: Multiply Counters—Activity 5: Multiply	The Number Games, Up, Up, and Array, Level C	Subtraction
10	Problem Solving • Multiplication	~	V				Ice Station Exploration, Arctic Algebra, Level D	

Lesson	Lesson Title	Interactive	Math on the	Animated Mat	h Models	iTools	Maga Math	Veesbulery
Number	Lesson Intie	Student Edition	Spot Video	Activity Name	Skill Number	r	Mega Math	Vocabulary
1	Algebra • Describe Patterns	V	V	Algebra: Find a Rule	19		Ice Station Exploration, Arctic Algebra, Level D	Pattern
2	Algebra • Find Unknown Factors	v	v	Algebra: Missing Factors	20	Number Charts— Activity 3: Multiplication Chart	lce Station Exploration, Arctic Algebra, Level C	Equation, array, Commutative Property of Multiplication, factor, product
3	Problem Solving • Use the Distributive Property	V	V					Distributive Property
4	Multiplication Strategies with Multiples of 10	v	v			Base-Ten Blocks—Activity 5: Multiply Number Lines— Activity 4: Multiply		Multiple, place value, tens
5	Multiply Multiples of 10 by 1-Digit Numbers	v	v	Multiply by Tens	21	Base-Ten Blocks—Activity 5: Multiply	The Number Games, Up, Up, and Array, Level I	Hundreds, ones

Rules for 1 and 0

Lesson		Interactive	Math on the	Animated Math Models				
Number	Lesson Title	Student Edition	Spot Video	Activity Name	Skill Number	iTools	Mega Math	Vocabulary
1	Problem Solving • Model Division	~	~			Counters— Activity 6: Divide	Country Countdown, Counting Critters, Level AA	
2	Size of Equal Groups	v	V			Base-Ten Blocks— Activity 6: Divide	Country Countdown, Counting Critters, Level X Numberopolis, Carnival Stories, Level T	Divide, equal groups
3	Number of Equal Groups	v	V	Model Division	22	Counters— Activity 5: Multiply	Country Countdown, Counting Critters, Level Y Numberopolis, Carnival Stories, Level U	
4	Model with Bar Models	v	v			Counters— Activity 6: Divide Base-Ten Blocks— Activity 6: Divide	Country Countdown, Counting Critters, Levels X and Y Numberopolis, Carnival Stories, Levels T and U	Dividend, divisor, quotient
5	Algebra • Relate Subtraction and Division	V	V	Relate Division and Subtraction	23	Base-Ten Blocks— Activity 6: Divide	The Number Games, Up, Up, and Array, Level E	
6	Investigate • Model with Arrays	~	v			Counters— Activity 1: Count		Array
7	Algebra • Relate Multiplication and Division	v	v	Algebra: Multiplication and Division	24	Number Charts— Activity 3: Multiplication Chart Counters— Activity 6: Divide		Inverse operations
8	Algebra • Write Related Facts	V	v	Algebra: Fact Families	25	Counters—		Related facts, factor product
9	Algebra • Division	~	~	Division Rules	26	Activity 6: Divide		Identity Property of

Multiplication

Lesson	Lesson Title	Interactive	Math on the	Animated M	ath Models	iTools	Maga Math	Veeebule
Number	Lesson Title	Student Edition	Spot Video	Activity Name	Skill Number	TIOOIS	Mega Math	Vocabulary
1	Divide by 2	~	~	Divide by 2 and 5	27	Counters—Activity 6: Divide	Ice Station Exploration, Arctic Algebra, Level E	
2	Divide by 10	V	V			Number Lines—Activity 5: Explore Number Charts—Activity 3: Multiplication Chart	The Number Games, Up, Up, and Array, Level G	Dividend, divisor factor, product
3	Divide by 5	~	~	Divide by 2 and 5	27	Number Lines—Activity 5: Explore Counters—Activity 6: Divide	Country Countdown, Counting Critters, Level AA	
						Number Lines—Activity 5: Explore		
4	Divide by 3	~	~			Counters—Activity 6: Divide		
			•	Divide by 3	28	Number Charts—Activity 3: Multiplication Chart	The Number Games, Up,	
				and 4	20	Counters—Activity 5: Multiply	Up, and Array, Level E	
5	5 Divide by 4	<ul> <li>✓</li> </ul>	~			Counters—Activity 6: Divide		Array
						Number Charts—Activity 3: Multiplication Chart		
6	Divide by 6	~	<ul> <li>✓</li> </ul>					
7	Divide by 7	~	<ul> <li>✓</li> </ul>	Divide by 6, 7, and 8	29	Counters—Activity 6: Divide	The Number Games, Up, Up, and Array, Level F	
8	Divide by 8	~	<ul> <li>✓</li> </ul>			Number Charts—Activity 3:		
9	Divide by 9	~	~			Multiplication Chart	The Number Games, Up, Up, and Array, Level G	
10	Problem Solving • Two- Step Problems	~	~			Counters—Activity 6: Divide		
11	Investigate • Order of Operations	v	v			Counters—Activity 5: Multiply Counters—Activity 6: Divide Number Charts—Activity 3: Multiplication Chart	Ice Station Exploration, Arctic Algebra, Level Q	Order of operations

Lesson	Lesser The	Interactive	Math on the	Animated M	ath Models	ite - la		Manakasha
Number	Lesson Title	Student Edition	Spot Video	Activity Name	Skill Number	iTools	Mega Math	Vocabulary
1	Equal Parts of a Whole	v	V	Equal Parts	30	Fractions—Activity 1: Show (Fraction Circles)		Whole, equal parts halves, thirds, fourths, sixths, eighths
2	Equal Shares	v	V			Fractions—Activity 1: Show (Two-Color Counters) Fractions—Activity 1: Show (Fraction Circles)	Fraction Action, Fraction Flare Up, Levels B and C	
3	Unit Fractions of a Whole	v	V	Unit Fractions	31	Fractions—Activity 1: Show (Fraction Circles)	Shapes Ahoy! Ship Shapes, Levels R and S Fraction Action, Fraction Flare Up, Level B	Fraction, unit fraction
4	Fractions of a Whole	v	V	Part of a Whole	34	Fractions—Activity 1: Show (Fraction Bars)	Shapes Ahoy! Ship Shapes, Level T Fraction Action, Fraction Flare Up, Level B	Numerator, denominator
5	Fractions on a Number Line	~	~			Fractions—Activity 1: Show (Fraction Bars)		
6	Relate Fractions and Whole Numbers	v	V	Mixed Numbers	33	Fractions—Activity 1: Show (Fraction Circles) Fractions—Activity 1: Show (Fraction Bars)	Fraction Action, Number Line Mine, Level F	Fraction greater than 1
7	Fractions of a Group	v	V	Part of a Group	34	Fractions—Activity 1: Show (Two-Color Counters) Fractions—Activity 1: Show (Fraction Circles)	Fraction Action, Fraction Flare Up, Levels B and C Shapes Ahoy! Ship Shapes, Levels R, S, and T	
8	Find Part of a Group Using Unit Fractions	~	~			Fractions—Activity 1: Show (Two-Color Counters)	Fraction Action Fraction Flam 11	
9	Problem Solving • Find the Whole Group Using Unit Fractions	v	V			Fractions—Activity 1: Show (Fraction Bars)	Fraction Action, Fraction Flare Up, Levels B and C	

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated M Activity Name	ath Models Skill Number	iTools	Mega Math	Vocabulary
1	Problem Solving • Compare Fractions	~	~					Compare, equal to (=), greater than (>), less than (<
2	Compare Fractions with the Same Denominator	V	۷			Number Lines— Activity 5: Explore (Fractions; Compare; Fraction Bars)	Fraction Action, Fraction Flare Up, Level F Fraction Action, Number Line Mine, Level I	Denominator
3	Compare Fractions with the Same Numerator	V	V	Compare Unit Fractions	36	Fractions—Activity 2: Compare (Fraction Circles) Fractions—Activity 2: Compare (Fraction Bars)	Shapes Ahoy, Ship Shapes, Level V	Numerator
4	Compare Fractions	~	~	Compare Fractions	35	Fractions—Activity 2: Compare (Fraction Circles)	Fraction Action, Fraction Flare Up, Level F Fraction Action, Number Line Mine, Level I	
5	Compare and Order Fractions	V	~			Fractions—Activity 2: Compare (Fraction Bars)		Order
6	Investigate • Model Equivalent Fractions	~	~	Equivalent		Fractions—Activity 2: Compare (Fraction Circles)	Fraction Action, Fraction Flare Up, Level D	Equivalent fractions, equivalent
7	Equivalent Fractions	V	V	Fractions	37	Fractions—Activity 2: Compare (Fraction Bars)	Fraction Action, Number Line Mine, Level E	

Solve Problems About

Liquid Volume and Mass

V

V

9

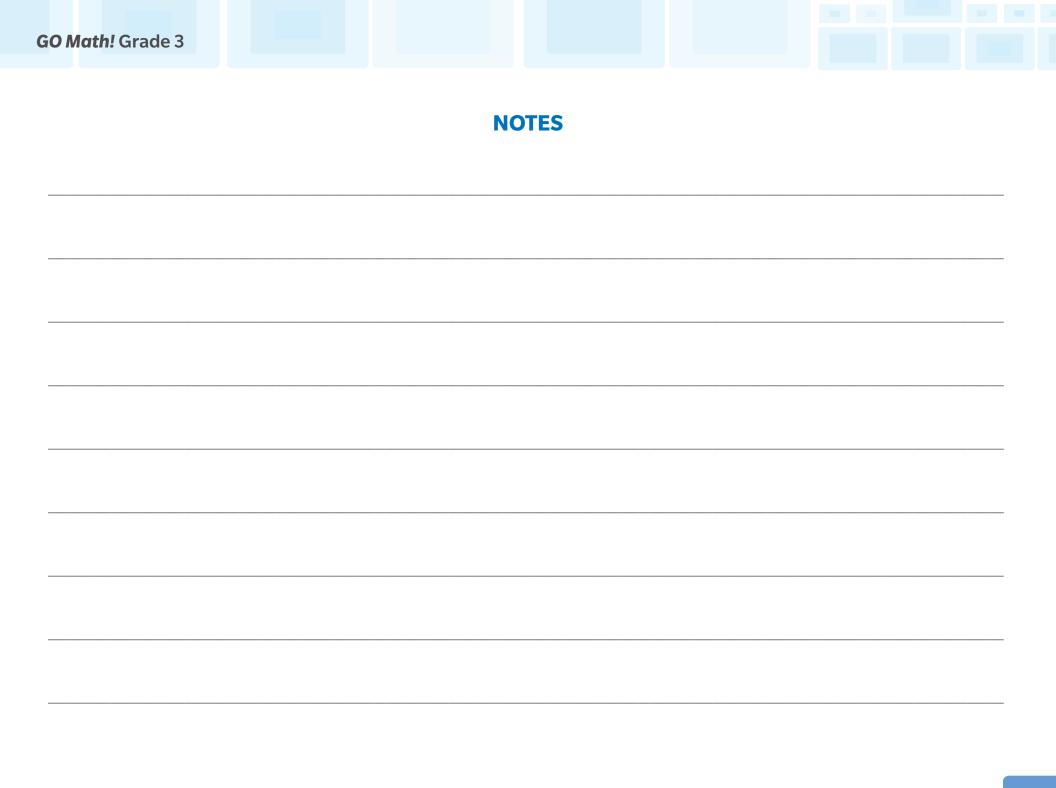
Chap	ter 10: Time, l	.ength, Lic	quid Vol	ume, and	Mass			
Lesson	Lesson Title	Interactive	Math on the	Animated M	ath Models	Teale	Maria Math	Veeskulem
Number	Lesson Title	Student Edition	Spot Video	Activity Name	Skill Number	iTools	Mega Math	Vocabulary
1	Time to the Minute	V	~	Tell Time	38	Measurement— Activity 3: Clocks	Country Countdown, Clock-a-Doodle-Doo, Level J	Minute, analog clock, digital clock, half hour, hour, quarter hour
2	AM and PM	~	r	AM and PM	39	(Time on a Clock)		Midnight, noon, A.M., P.M.
3	Measure Time Intervals	V	~	Model Elapsed Time	40	Measurement— Activity 3: Clocks	Country Countdown, Clock-a-Doodle-Doo, Level K The Number Games, Tiny's Think Tank,	Elapsed time
4	Use Time Intervals	~	~			(Elapsed Time) Number Lines— Activity 5: Explore		
5	Problem Solving • Time Intervals	V	v			- Activity 5. Explore	Level D	
6	Measure Length	V	~	Estimate and Measure Inches	41		Ice Station Exploration, Linear Lab, Levels C, D, and F	Inch (in.)
7	Estimate and Measure Liquid Volume	V	v	Metric Capacity	42	Measurement— Activity 2:		Liquid volume, liter (L)
8	Estimate and Measure Mass	~	~	Mass	43	Equivalent Measures (Weight/Mass)		Mass, gram (g), kilogram (kg)

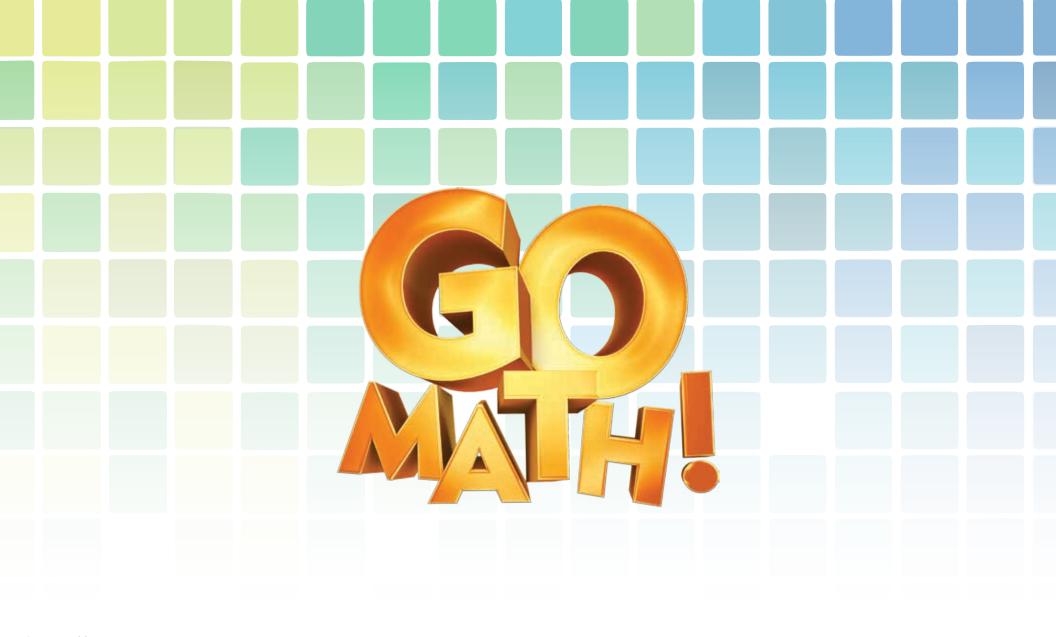
Number Lines—

Activity 5: Explore

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		iTools	Mega Math	Vocabulary
				Activity Name	Skill Number	110013	incga math	, could y
1	Investigate • Model Perimeter	V	V	Estimate and Measure Perimeter	44	Geometry—Activity 3: Area and Perimeter (Rectangle)	lce Station Exploration, Polar Planes, Level P	Perimeter
2	Find Perimeter	~	v					
3	Algebra • Find Unknown Side Lengths	V	V	Relate Perimeter and Area	45			
4	Understand Area	v	v	Area of Plane Figures	46		lce Station Exploration, Polar Planes, Level Q	Area, unit square, square unit
5	Measure Area	v	v					
6	Use Area Models	V	v					Multiplication, repeated addition
7	Problem Solving • Area of Rectangles	v	v			Geometry—Activity 3: Area and Perimeter (Rectangle)		Pattern
8	Area of Combined Rectangles	V	v					Distributive Propert
9	Same Perimeter, Different Areas	v	v	Relate Perimeter and Area		Geometry—Activity 3: Area and Perimeter (Rectangle)	lce Station Exploration, Polar Planes, Level S	
10	Same Area, Different Perimeters	V	v		45			

Lesson Number	Lesson Title	Interactive Student Edition	Math on the Spot Video	Animated Math Models		itte - Is		
				Activity Name	Skill Number	- iTools	Mega Math	Vocabulary
1	Describe Plane Shapes	V	V	Points, Lines, and Rays	47	Geometry—Activity 2: Plane Figures (Sides and Vertices) Geometry—Activity 5: Draw (Segments, Lines, and Rays)		Plane shape, point, line, line segment, endpoint, ray, two- dimensional shape, closed shape, open shape
2	Describe Angles in Plane Shapes	~	v			Geometry—Activity 2: Plane Figures (Sides and Vertices)		
						Geometry—Activity 5: Draw (Angles)		Angle, vertex, right angle
						Measurement—Activity 3: Clocks (Time on a Clock)		
3	Identify Polygons	V	V	Identify Plane Figures	48	Geometry—Activity 2: Plane Figures (Sides and Vertices) Geometry—Activity 5: Draw (Polygons)	Ice Station Exploration, Polar Planes, Level D Shapes Ahoy! Ship	Polygon, side, quadrilateral, pentagon, hexagon, octagon, decagon, triangle
						Geometry—Activity 6: Explore (Plane Figures)	Shapes, Level J Shapes Ahoy! Sea Cave Sorting, Level K	
4	Describe Sides of Polygons	V	V	Types of Lines	49	Geometry—Activity 5: Draw (Segments, Lines, and Rays)	lce Station Exploration, Polar Planes, Level C	Intersecting lines, perpendicular lines parallel lines
5	Classify Quadrilaterals	~	~	Quadrilaterals	rals 50	Geometry—Activity 2: Plane Figures (Sides and Vertices)	Ice Station Exploration, Polar	Rhombus, trapezoid rectangle, square
6	Draw Quadrilaterals	~	<b>v</b>				Planes, Level G	
7	Describe Triangles	~	~			Geometry—Activity 5: Draw (Polygons)		
8	Problem Solving • Classify Plane Shapes	~	~				Shapes Ahoy! Sea Cave Sorting, Level K	Venn diagram
9	Investigate–Relate Shapes, Fractions, and Area	V	V			Geometry—Activity 3: Area and Perimeter (Explore)	Shapes Ahoy! Ship Shapes, Level S	Area, unit fraction





Knewton<sup>™</sup> is a trademark of Knewton, Inc. Houghton Mifflin Harcourt<sup>™</sup>, HMH<sup>®</sup>, Personal Math Trainer<sup>®</sup> and design, and GO Math!<sup>®</sup> are trademarks or registered trademarks of Houghton Mifflin Harcourt. © Houghton Mifflin Harcourt. All rights reserved. Printed in the U.S.A. 08/16 MS181443



hmhco.com • 800.225.5425



hmhco.com/gomath