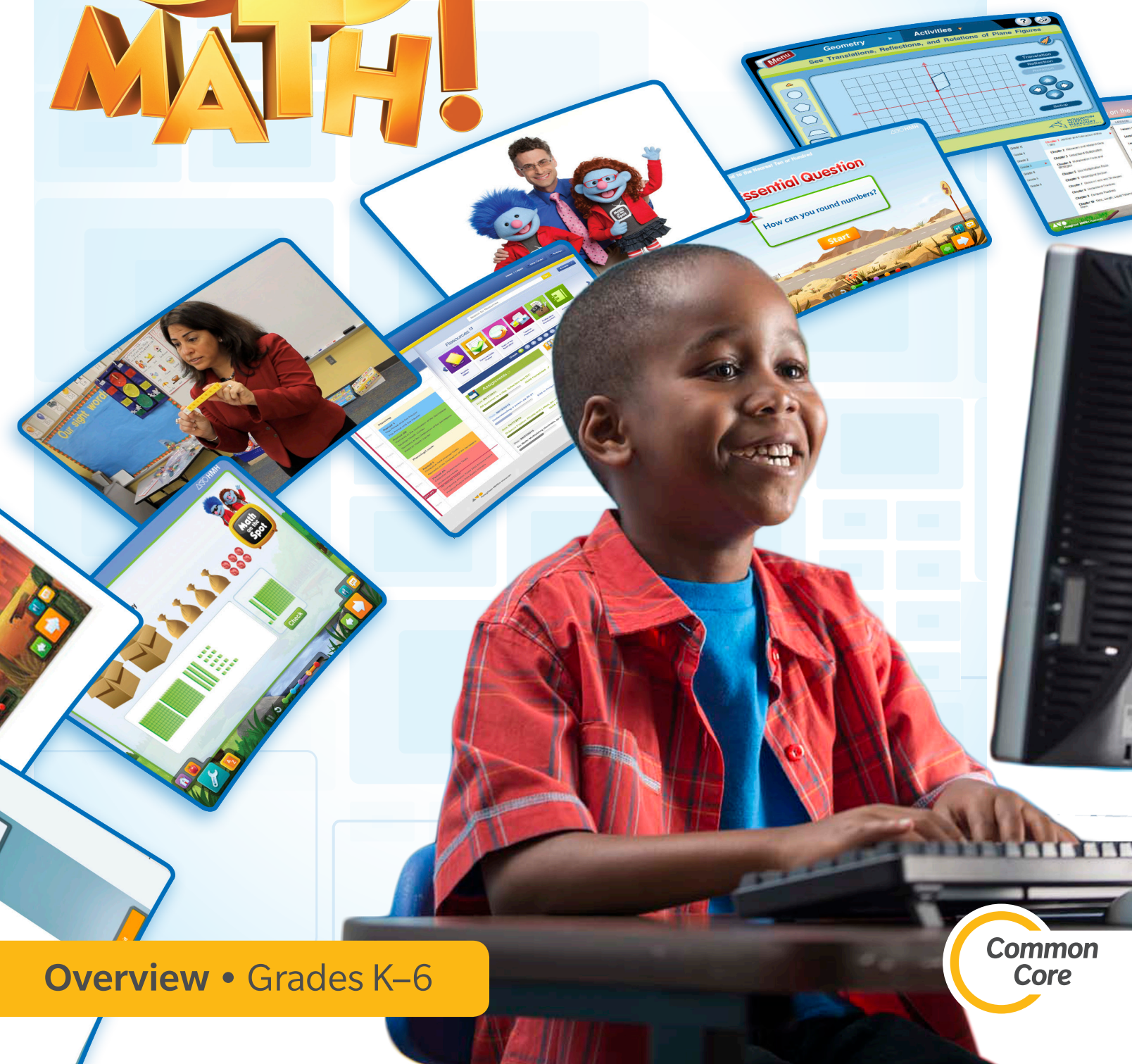
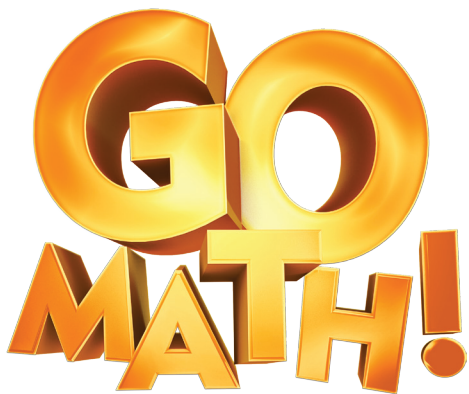


GO MATH!

Anytime,
anywhere





Harvard Study Shows Students Improve with **GO Math!**

A research report by the Harvard University Center for Education Policy finds significant positive achievement for students using **GO Math!**.

To view the entire report, use this link

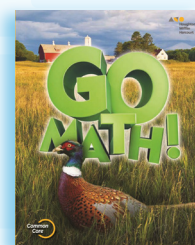
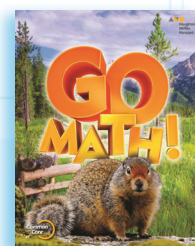
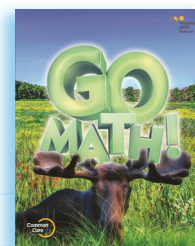
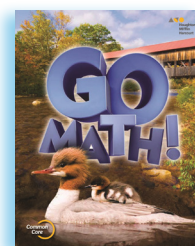
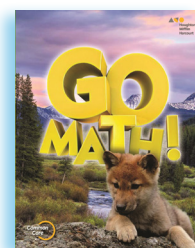
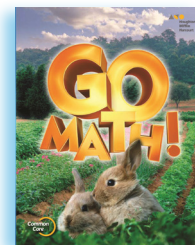
<http://www.hmhco.com/~media/sites/home/education/disciplines/mathematics/elementary/go-math/teaching-higher-report.pdf?la=en>

Over the past five years, **GO Math!**® has provided trusted content to over seven million students in every U.S state and 72 countries. We have been busy making our 2015 edition even better by adding exciting new features for students and teachers. **GO Math!** was designed from the ground up to meet the demands of the Common Core State Standards.

GO Math! is:

- Focused -- The majority of time is spent on the major work of each grade level. Important connections are made between supporting/additional work and the major work, and there is no extraneous content.
- Coherent -- A carefully designed progression of content within and across grade levels helps students and teachers see the big picture.
- Rigorous -- Throughout the program, you'll find an equal emphasis placed on conceptual understanding, procedural skill and fluency, and application.

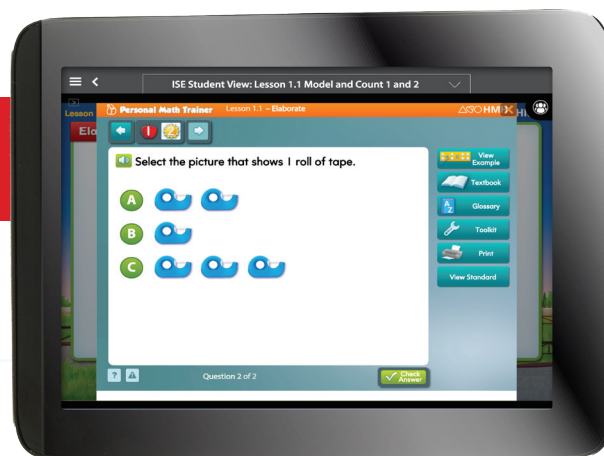
GO Math! provides all the support you will need for Common Core Success!



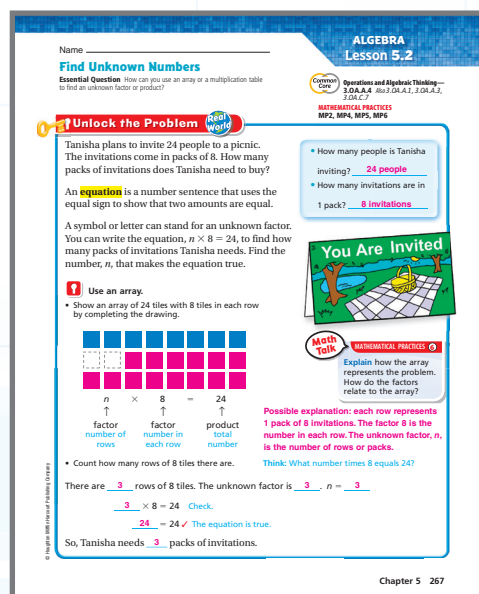
Access **GO Math!** 2015 now

GO Math! is flexible and has parallel print and digital pathways. No matter what the technology situation is in your classroom, **GO Math!** has an abundance of resources to keep students engaged and on track.

Digital



Print



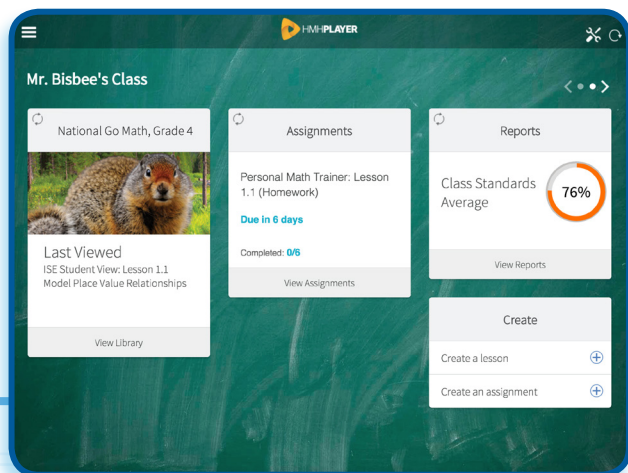
For Teachers



GO Math! anytime, anywhere

With **GO Math!** 2015, you'll notice that students enjoy more access to digital content and resources than ever before. At the heart of this on-the-go experience lies the *HMH Player*®, an all-in-one app for 21st-century learners.

HMH Player

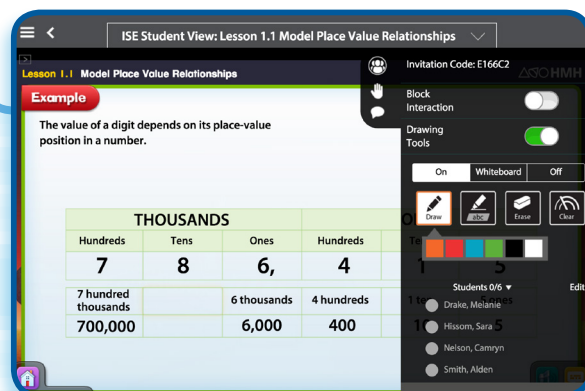


Work Offline

Students can download content and assignments, work offline, and then synchronize their work once they are back online.

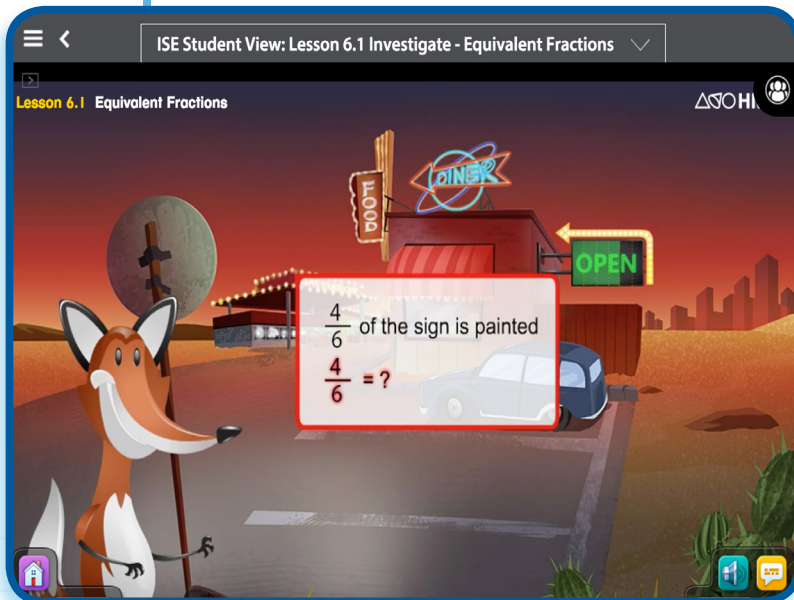
Collaborate

Students can ask questions and send messages to their teacher.



HMHPLAYER®
Making 1:1 Learning a Reality

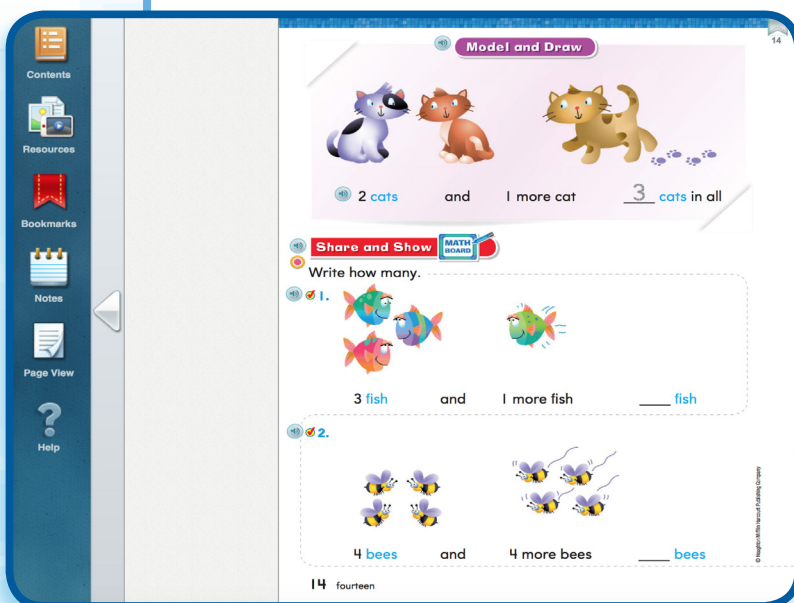
Interactive Student Edition (iSE)



Students will love this dynamic and fun approach to learning math. The iSE:

- Contains the same mathematical content as the Student Edition eBook but uses different examples
- Delivers access to embedded media, the **Personal Math Trainer®**, and *Math on the Spot* videos
- Works on many devices and tablets
- Provides parents with the ability to study math alongside their child

Student Edition eBook



The Student Edition eBook is the online version of the Write-in Student Edition and includes:

- Note-taking and highlighting tools
- Bookmarking
- Online answer recording
- Links to interactive enhancements and digital assessment
- Works on many devices and tablets
- Includes audio for all grade levels

GO Math! motivates students to learn

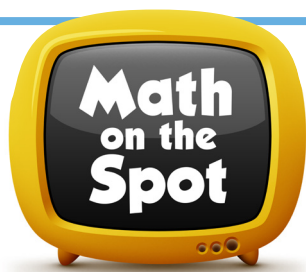
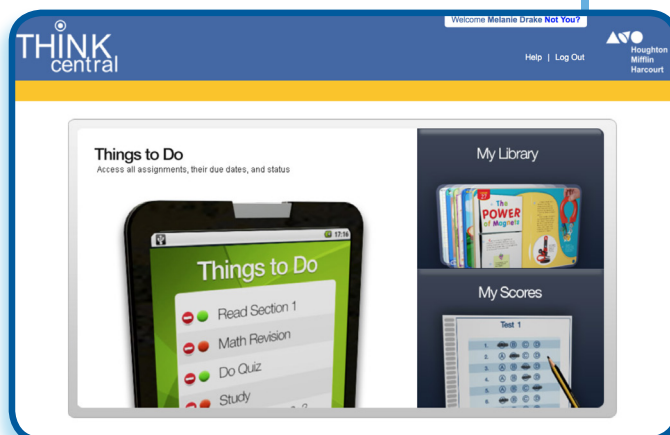
Student Dashboard

Stay on track:

Keep students on track with access to Things to Do, My Library, and My Scores.

Never lose work:

Work completed using the *HMH Player* and eStudent Edition synchronizes with the Student Dashboard.



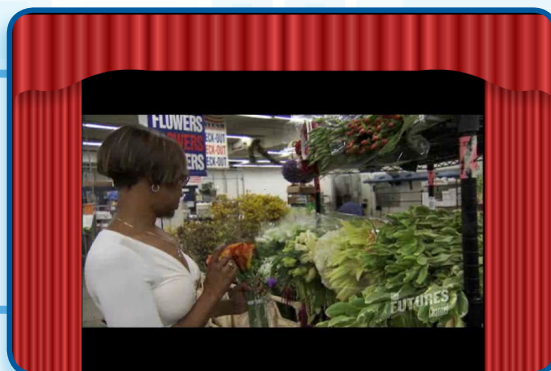
Math on the Spot Videos

Make learning fun with our dynamic *Math on the Spot* videos, starring program authors, and at K–2, Joey and Jeannie, our *Math on the Spot* puppets. These videos:

- Walk students through solutions to selected problems in the Student Edition
- Provide step-by-step instructions and explanations of key math concepts
- Can be assessed through the Dashboard or on-the-go using QR codes in the Student Edition

Real-World Videos (Grades 3–6)

These videos introduce lessons using math in real-world settings.



Digital Tools for Online Problem Solving



Virtual Tools (available in the eStudent Edition and Interactive Student Edition) enable students to work through problems at point-of-use.



iTools (available from the Student Dashboard) provide virtual manipulatives to help students solve problems.



Animated Math Models

- Students at Grades K–2 love animated introductions from Curious George.
- Lesson activities, Grades K–6, include audio.

Mega Math

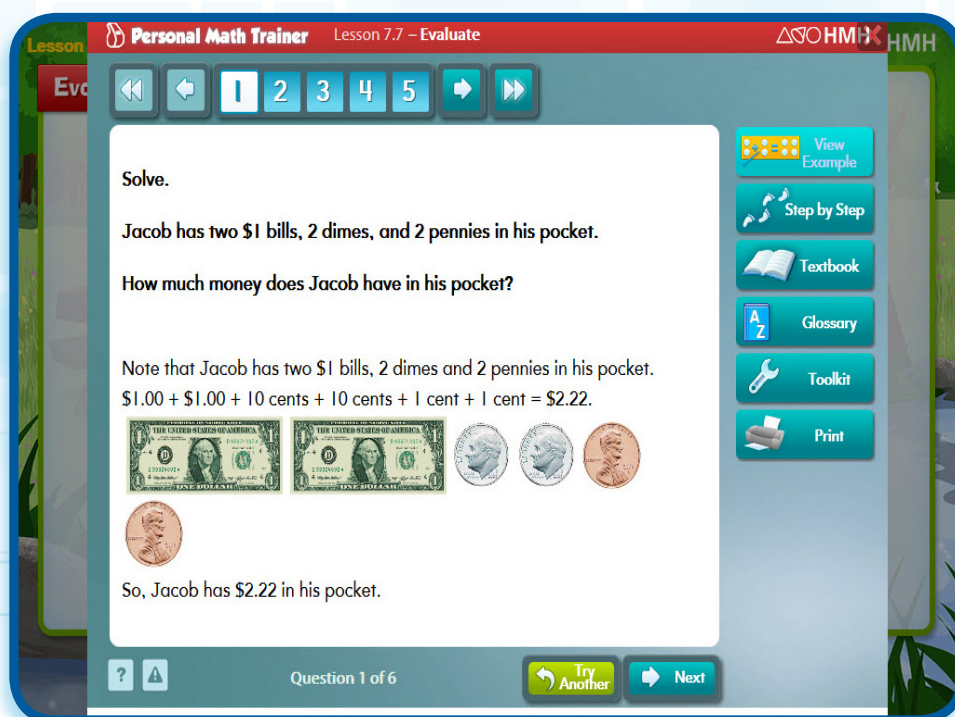
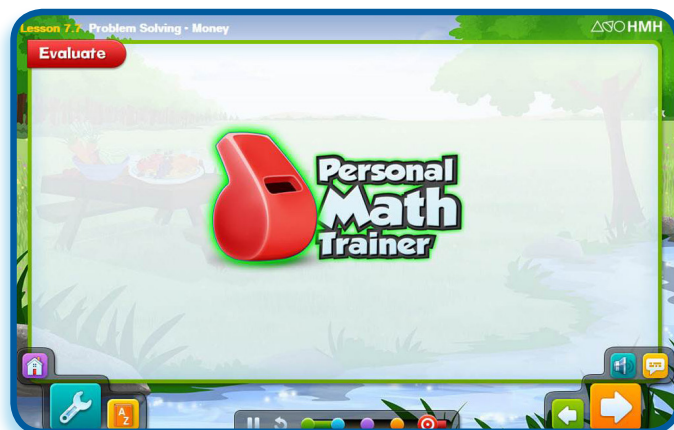
Provides additional lesson practice with engaging activities. Includes audio and animation.



GO Math! personalizes learning (at school and at home!)

The **Personal Math Trainer Powered by Knewton™**, is the ultimate online, adaptive assessment and personalized learning system for your students. Make practice, intervention, and assessment easy and fun with:

- Pre-built and customizable assignments for homework, tests, and course- and standards-based intervention
- Assessments featuring varied problem types and tech-enhanced problems
- Immediate feedback on practice and homework
- Knewton allows teachers to provide students with timed personalized intervention experiences or personalized warm-up and enrichment experiences that are based on a student's profile as well as individual strengths and weaknesses

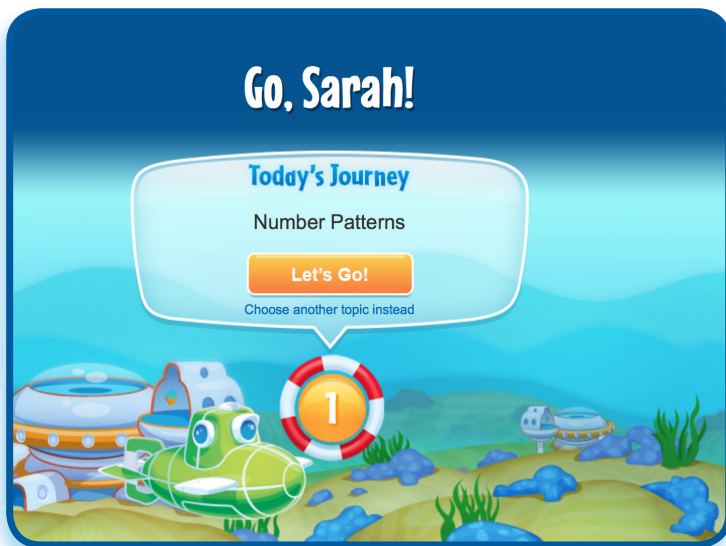


Available learning aids include:

- Guided examples
- Step-by-step solutions
- Video tutorials

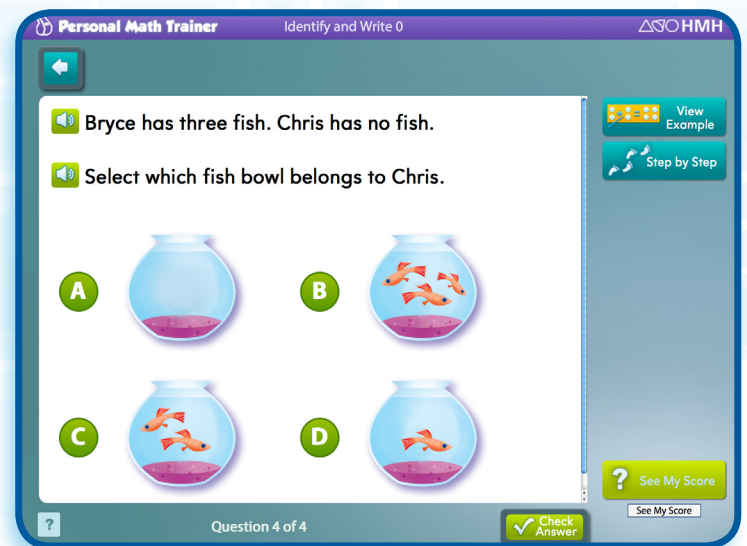
Math practice outside the classroom

Many students can benefit from having extra practice, review or enrichment outside the classroom. *Go Math! Academy*® is an online tool that lets students work independently focusing on skills they want to practice.



Go Math! Academy provides students with:

- Age-appropriate practice problems with step-by-step help
- Over 700 help videos featuring accessible and friendly hosts
- Tips and tutorials
- Games and rewards for extra motivation



Go Math! Academy also promotes parent involvement with a parent dashboard to monitor child progress, as well as a searchable library of help videos available for parent and child viewing.

For more information on purchasing *Go Math! Academy* to support your students at home, contact your Account Executive.

GO Math! builds deep understanding and fluency

Write-in Student Edition

The **GO Math!** Write-in Student Edition (SE) is based on the 5 E Model of Instruction and delivers the rigor your students need for success on common and state high-stakes assessments. This engaging edition:

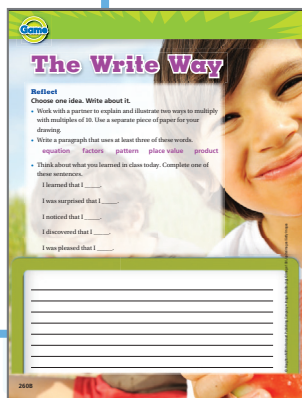
- Contains embedded practice pages
- Now includes games and an increased emphasis on vocabulary

Vocabulary and Writing Activities

Each chapter of **GO Math!** gives students the opportunity for extra vocabulary practice in the classroom and at home.

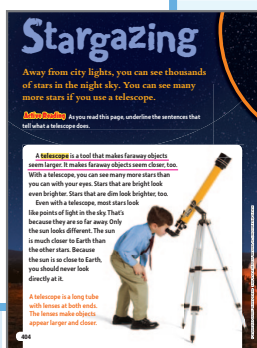
Parents and siblings can get in on the fun helping their **GO Math!** students with:

- Vocabulary Cards
- Vocabulary Games
- Writing Activities



S.T.E.M.

Available online in the Teacher Digital Management Center are STEM activities and worksheets for each chapter.



Learning Progressions

GO Math! fosters coherence within the Content Standards and Learning Progressions. These Learning Progressions allow you an opportunity to clearly see how the standards you teach in your classroom are related to those taught in other grade levels.

Common Core State Standards Across the Grades

Before	Grade 3	After
Domain: Operations and Algebraic Thinking Cluster C: Work with equal groups of objects to gain foundations for multiplication. Standard: 2.OA.C.3	Domain: Operations and Algebraic Thinking Cluster A: Represent and solve problems involving multiplication and division. Standard: 3.OA.A.4 Domain: Number and Operations in Base Ten Cluster A: Use place value understanding and properties of operations to perform multi-digit arithmetic. Standard: 3.NBT.A.3	Domain: Operations and Algebraic Thinking Cluster C: Generate and analyze patterns. Standard: 4.OA.C.5 Domain: Number and Operations in Base Ten Cluster B: Use place value understanding and properties of operations to perform multi-digit arithmetic. Standard: 4.NBT.B.5

Lesson 5.4

Multiplication Strategies with Multiples of 10

Essential Question What strategies can you use to multiply with multiples of 10?

Unlock the Problem

You can use models and place value to multiply with multiples of 10.

Activity Model multiples of 10.

Materials base-ten blocks

Model the first nine multiples of 10.

What are the first nine multiples of 10?

10, 20, 30, 40, 50, 60, 70, 80, 90

Best Care Veterinary Clinic offered free pet care classes for 5 days. Erin attended the pet care class for 30 minutes each day. How many minutes did Erin attend the class?

One Way Use a number line.

$5 \times 30 =$ **Think:** $30 = 3$ tens

STEP 1 Complete the number line. Write the labels for the multiples of 10.

$5 \times 30 =$ **150**

So, Erin attended the pet care class for **150** min.

Another Way Use place value.

MODEL

THINK

$5 \times 30 = 5 \times 3$ tens
 $= 15$ tens $= 150$

So, $5 \times 30 = 150$.

Try This!

$4 \times 50 = 4 \times 5$ tens
 $= 20$ tens $= 200$

Share and Show

Use a number line to find the product.

1. $3 \times 40 = 120$ **Think:** There are 3 jumps of 40.

2. $8 \times 20 = 160$

Use place value to find the product.

3. $3 \times 70 = 3 \times 7$ tens
 $= 21$ tens $= 210$

4. $50 \times 2 = 5$ tens $\times 2$
 $= 10$ tens $= 100$

Math Talk

Make Sense of Problems Why does 5×30 have one zero in the product and 4×50 have two zeros in the product?

Possible explanation: since there is a zero in the product for $4 \times 5 = 20$, the product for 4×50 has one more zero than the product for 5×30 .

Math Talk

Use Repeated Reasoning Why will the product of a multiplication problem be the same when the factors are reversed?

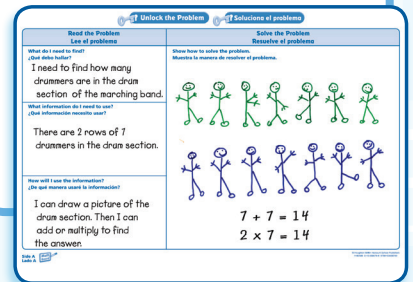
Access to Digital Resources

Students can scan QR codes in the Write-in Student Edition to access engaging *Math on the Spot* videos for every lesson.



Bilingual MathBoard

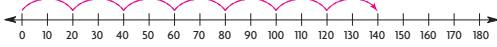
- Write-on/wipe-off, available for each grade, K–6
- Helps students organize their thinking
- Enables students to engage in the Mathematical Practices and supports Math Talk



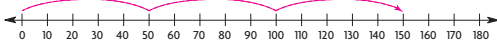
On Your Own

Use a number line to find the product.

5. $7 \times 20 = 140$



6. $3 \times 50 = 150$



Use place value to find the product.

7. $6 \times 60 = 6 \times 6 \text{ tens} = 36 \text{ tens} = 360$

8. $50 \times 7 = 5 \text{ tens} \times 7 = 35 \text{ tens} = 350$

Problem Solving • Applications

Use the table for 9–11.

9. **CHALLENGE** A bottle of shampoo costs \$8 and a package of cat toys costs \$7. If the clinic sells its entire supply of shampoo and cat toys, how much money will it receive?

\$230

10. **What's the Question?** Each bag of treats has 30 treats. The answer is 240.

Possible question: How many treats are there in all?

11. **SMARTER** There are 4 bottles of vitamins in each box of vitamins. Each bottle of vitamins has 20 vitamins. If the clinic wants to have a supply of 400 vitamins, how many more boxes should it order?

2 boxes

Best Care Clinic Pet Supplies	
Item	Amount
Cat toys	10 packs
Treats	8 bags
Shampoo	20 bottles
Vitamins	3 boxes



Chapter 5 • Lesson 4 283

- c. Write the steps you will use to solve the problem.
Possible answer: first I will multiply 6×20 to find the number of chairs Hiromi has already set up, $6 \times 20 = 120$. Then I will subtract to find how many more chairs Hiromi needs to set up, $155 - 120 = 35$. So, Hiromi needs to set up 35 more chairs.

- d. Complete the sentences.
Hiromi needs to set up 155 chairs for people to attend the program.
She has set up 6 rows with 20 chairs in each row.
So, Hiromi needs to set up 35 more chairs.

13. **CHALLENGE** Last week, Dr. Newman examined the paws of 30 dogs at her clinic. She examined the paws of 20 cats. What is the total number of paws Dr. Newman examined last week?

200 paws

14. **SMARTER** Nick made this multiplication model. Complete the equation that represents the model.



Possible answers: $4, 30, 120; 30, 4, 120$

284

Problem Types

GO Math! lessons include the various types of story problems and problem-solving situations for students to solve, throughout **GO Math!**.

Unlock the Problem

12. **Make Sense of Problems** Hiromi needs to set up chairs for 155 people to attend the school career day program. So far she has set up 6 rows with 20 chairs in each row. How many more chairs does Hiromi need to set up?

- a. What do you need to find?
how many more chairs Hiromi needs to set up
- b. What operations will you use to find how many more chairs Hiromi needs to set up?
multiplication and subtraction

- c. Write the steps you will use to solve the problem.
Possible answer: first I will multiply 6×20 to find the number of chairs Hiromi has already set up, $6 \times 20 = 120$. Then I will subtract to find how many more chairs Hiromi needs to set up, $155 - 120 = 35$. So, Hiromi needs to set up 35 more chairs.

- d. Complete the sentences.
Hiromi needs to set up 155 chairs for people to attend the program.
She has set up 6 rows with 20 chairs in each row.
So, Hiromi needs to set up 35 more chairs.



Unknown Product; Difference Unknown

Strategies and Practice for Skills and Facts Fluency

Available online as part of the Teacher Digital Management Center are blackline masters to help students achieve fact fluency. Included are:

- Basic Facts Strategies
- Basic Facts Workshop
- Basic Facts Practice Sheets

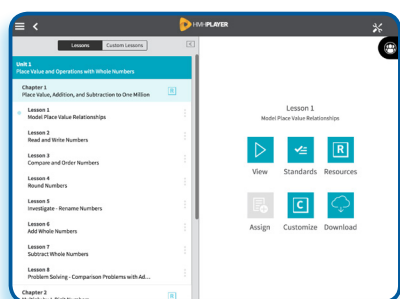
GO Math! transforms planning and teaching

GO Math! Digital lets you choose how you'll spend your time—on planning, on instruction, on assessment, and on intervention. Our flexible content and resources adapt to fit the needs of your busy classroom so you'll be free to spend your energy where your students need it most.



As your students work, practice, and collaborate using the *HMH Player*, we've built in special features just for you. The *HMH Player* provides teachers with a practical solution for working on the go. The Download Manager allows you to access content without an internet connection.

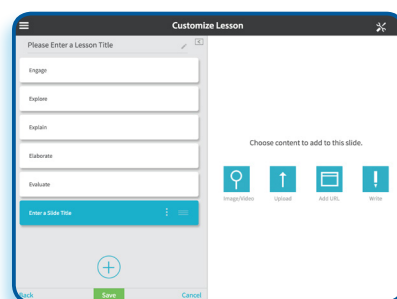
Plan



You can use the *HMH Player* ePlanner to:

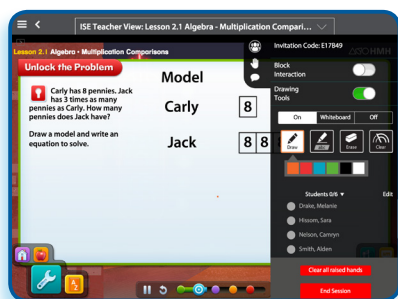
- Plan your classes
- Create and view assignments
- Access all resources with customizable planning tools

Manage



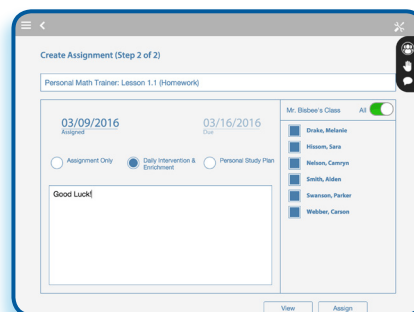
- Create customized content and lessons
- Link to related content or resources
- Present interactive lessons in class—right from the interactive whiteboard

Collaborate



- Respond to student messages and “raised hands” when using the Classroom Collaboration feature

Assign

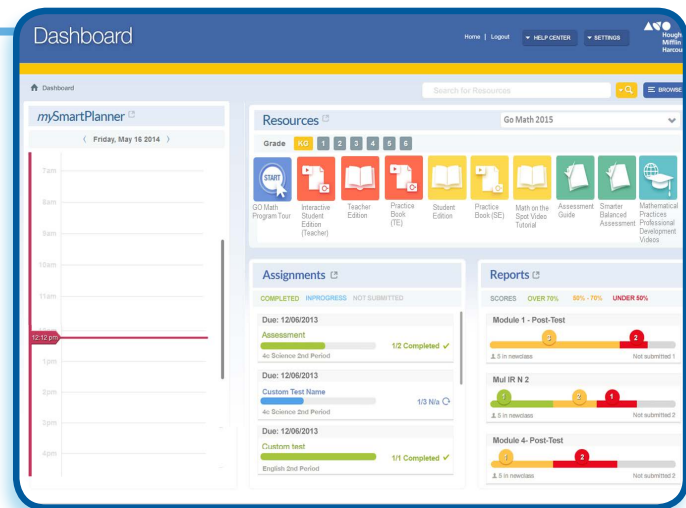


- Assign content to students for online/offline work

Teacher Dashboard

The Teacher Dashboard is your one-stop solution for easy access to a variety of resources:

- eTeacher Edition
- Reports
- Assignments
- Professional Development Videos
- mySmartPlanner—save notes for each class!
- Presentation tools



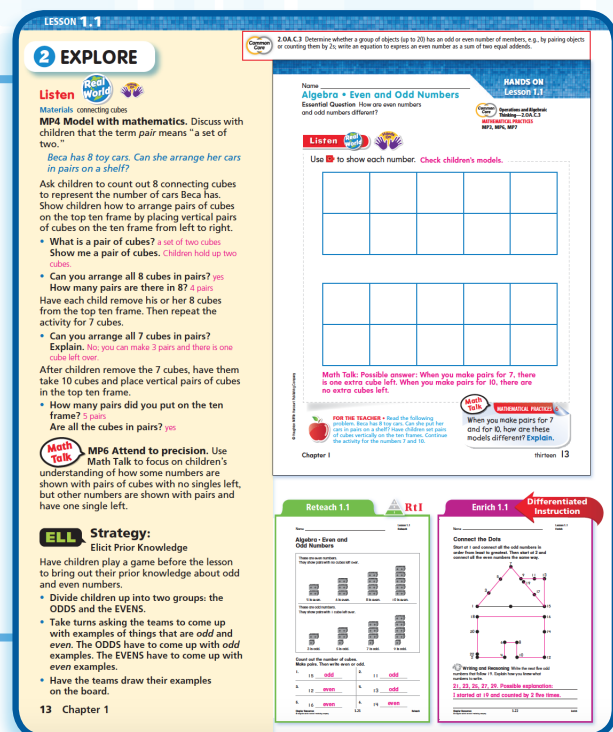
Save time. Use the Dashboard.

Along with all student work and grades, all work performed in the *HMH Player* is automatically synced with the Teacher Dashboard.

Teacher Edition Online

The Teacher Edition Online is based on the 5E Model of Instruction and provides strong instructional support with:

- Questioning strategies
- Teaching tips
- Resources for differentiated instruction
- Additional activities
- Professional Development videos, and more



GO Math! keeps students moving in the right direction

With **GO Math!**, you'll find that robust, real-time assessment and intervention is just a page or a click away.

Assessment

Diagnostic, formative, and summative assessment have been incorporated into both print Student Editions and the **Personal Math Trainer Powered by Knewton**.

Diagnostic

Show What You Know is connected to special intervention and challenge resources and helps you answer questions like:

Are my students prepared for this chapter?

Do my students need intensive or strategic intervention?

Show What You Know • Diagnostic Assessment
Use to determine if students need intervention for the chapter's prerequisite skills.

Were students successful with Show What You Know?

	Missed More Than	Personal Math Trainer	Intervene with	
TIER 3	Think Addition to Subtract	1	1.OA.4	Intensive Intervention Skill 12: Intensive Intervention User Guide Activity 1
TIER 2	Addition Facts	1	1.OA.6	Strategic Intervention Skill 3
TIER 2	Subtraction Facts	1	1.OA.6	Strategic Intervention Skill 4

3 Chapter 1

Grab & Go!
Differentiated Centers Kit
Use the Enrich Activity in the Chapter Resources or the independent activities in the Grab-and-Go™ Differentiated Centers Kit.

Mid-Chapter Checkpoint
Lessons 2.1 to 2.3

Formative Assessment
Use the Mid-Chapter Checkpoint to assess students' learning and progress in the first half of the chapter. The formative assessment provides the opportunity to adjust teaching methods for individual or whole class instruction.

Quick Check **RtI**
If a student misses the checked exercises
Then Differentiate Instruction with

- Reteach 2.5
- Personal Math Trainer 3.MD.B.3, 3.NBT.A.2
- RtI Tier 1 Activity (online)

Formative

RtI Quick Checks and Mid-Chapter Checkpoints help you monitor and assess student learning and understanding and adjust your instruction accordingly.

Summative

Use the **Data-Driven Decision Making** chart to provide intervention to students who haven't mastered chapter objectives.

Data-Driven Decision Making **RtI** **Chapter 1**
Based on the results of the Chapter Review/Test use the following resources to review skills.

Item	Lesson	Standards	Content Focus	Personal Math Trainer	Intervene with
1, 2	1.1	3.OA.D.9	Number patterns	3.OA.9	R—1.1
3, 4	1.2	3.NBT.A.1	Rounded to the nearest 10 or 100	3.NBT.1	R—1.2
5, 7, 20	1.3	3.NBT.A.1	Estimate sums	3.NBT.1	R—1.3
8	1.4	3.NBT.A.2	Mental math strategies for addition	3.NBT.2	R—1.4
9, 10, 12, 13	1.5, 1.6, 1.7	3.NBT.A.2	Use properties, strategies, or place value to add	3.NBT.2	R—1.5; R—1.6; R—1.7
6, 7, 20	1.8	3.NBT.A.1	Estimate differences	3.NBT.1	R—1.8
14	1.9	3.NBT.A.2	Mental math strategies for subtraction	3.NBT.2	R—1.9
11, 15, 16, 19	1.10, 1.11	3.NBT.A.2	Use place value to subtract	3.NBT.2	R—1.10; R—1.11
17, 18	1.12	3.OA.D.8	Problem Solving: Model addition and subtraction, two-step problems	3.OA.8	R—1.12

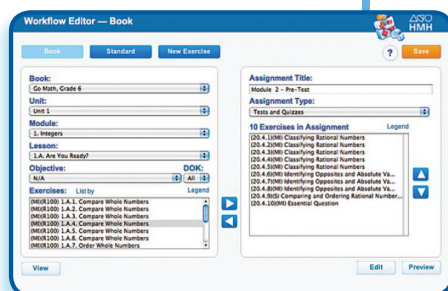
Key: R—Reteach (in the Chapter Resources)
79-80 Chapter 1

Intervention

You'll find intervention tools in our robust **Personal Math Trainer** and built into the program itself.



Personal Math Trainer



Customized Assignments

Choose from thousands of items, correlated and searchable by lesson, Common Core State Standard, and Depth of Knowledge.

Rtl Support at Every Level

Comprehensive Rtl support improves learning and **GO Math!** provides three options for intervention at each tier:

- Print support
- Focused, hands-on activities
- Comprehensive online support with the **Personal Math Trainer**

Intervention Options Response to Intervention

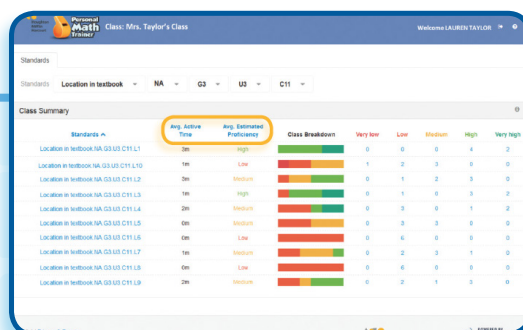
Use Show What You Know, Lesson Quick Check, and Assessments to diagnose students' intervention levels.

TIER 1	TIER 2	TIER 3	ENRICHMENT
On-Level Intervention For students who are generally at grade level but need early intervention with the lesson concepts, use: • Reteach (in the Chapter Resources) • Personal Math Trainer • Tier 1 Activity online	Strategic Intervention For students who need small group instruction to review concepts and skills needed for the chapter, use: • Strategic Intervention Guide • Personal Math Trainer • Prerequisite Skills Activities • Tier 2 Activity online	Intensive Intervention For students who need one-on-one instruction to build foundational skills for the chapter, use: • Intensive Intervention Guide • Personal Math Trainer • Prerequisite Skills Activities	Independent Activities For students who successfully complete lessons, use: • Grab & Go! • Differentiated Centers Kit • Advanced Learner's Activity for every lesson • Enrich Activity (in the Chapter Resources) • MIM Mega Math

Addition and Subtraction Within 1,000 4

Instant Reporting

Use the reporting tool within the **Personal Math Trainer** to learn where your students struggle and where they excel—by student, class, standard, and book structure.



Targeted Recommendations

Use the **Personal Math Trainer** to target individual needs with personalized intervention assignments, built with content up to two grades below level and designed to support each Rtl tier.

Data-Driven Decision Making

Based on the results of the Mid-Chapter Checkpoint, use the following resources to strengthen individual or whole class instruction.

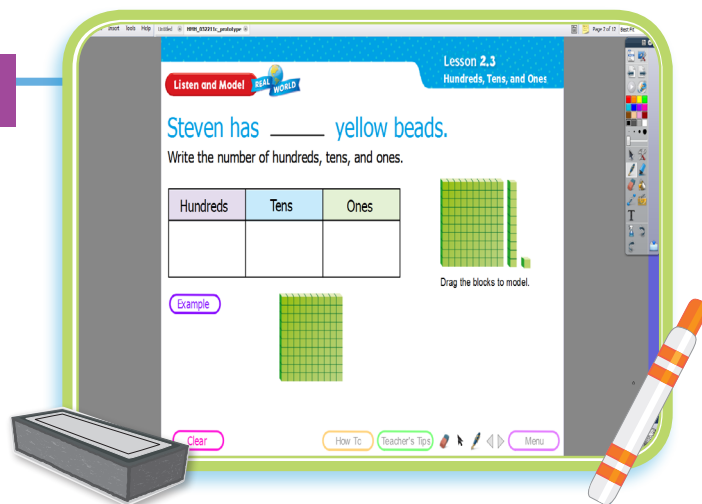
Item	Lesson	Common Error	Personal Math Trainer	Intervene with
3-6	2.1	May incorrectly read the rows of the frequency table	3.MD.B.3, 3.OA.D.8	R—2.1
7-9	2.2	May not understand what each symbol represents	3.MD.B.3, 3.NBT.A.2	R—2.2

Key: R—Reteach (in the Chapter Resources)

Use GO Math! Personal Math Trainer to tailor your instruction to meet the needs of every student

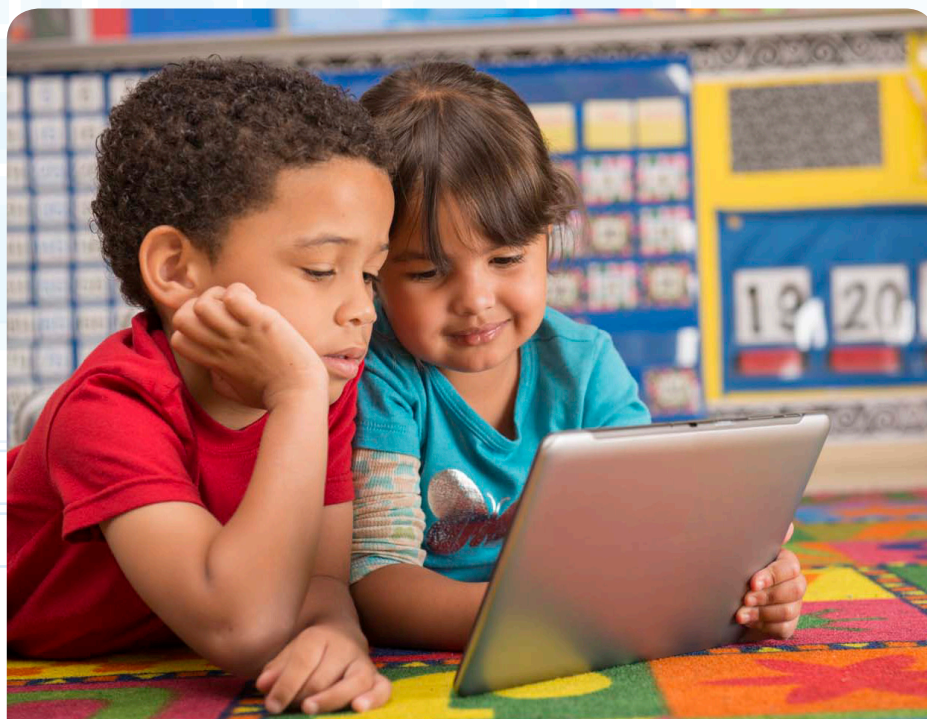
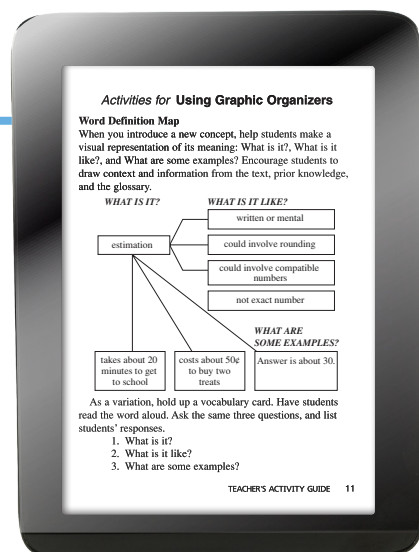
Interactive Whiteboard Lessons

- Provide rich and engaging learning experiences
- Encourage active participation throughout the lesson
- Available for every lesson in **GO Math!**



Vocabulary Activities Teacher Guide

- Contain activities for introducing, practicing, and reinforcing math vocabulary
- Increase student comprehension and learning
- Help students read words with ease in lessons, in word problems, and on standardized tests
- Also available in print



GO Math! offers ready-made differentiated resources

We've organized our teacher collections by chapter to let you move easily between the program and the resources you'll need for classroom instruction. Chapter books for both Teacher Editions and Chapter Resources also provide you with the organization and flexibility to teach concepts and skills in a customized order.

Teacher Edition

- Lighten your load with separate chapter books, color-coded by critical area
- Organized and flexible
- Includes "Learning Progressions and the Common Core Standards Across the Grades" chart at the beginning of every chapter

Planning Guide

- Chapter Planners with Common Core correlations
- Pacing and time spent on major work
- Additional end-of-year planning resources

Chapter Resource Books

- Multi-volume teacher resources available for every chapter
- Contain a variety of resources including: assessments and answer keys, school-home letter, vocabulary game directions, daily enrichment activities, reteach intervention for every lesson, and chapter performance tasks

Grab-and-Go® Differentiated Centers Kit



- Instant activities, games, and literature for each lesson, K–6
- Opens to 42" x 25"

Grab-and-Go Manipulative Kits



- Hands-on manipulatives bring lessons and content to life
- Available in classroom and custom kit sizes

GO Math! empowers all educators

GO Math! offers Professional Development resources to meet a variety of needs for educators with busy schedules.

For self-paced development, math practices, and PD videos are available. For more in-depth development, our specialists have rich product knowledge plus classroom expertise to provide you with the support you need for successful implementation.

Common Core Math Practices Professional Development Videos

- Videos with strategies for teaching Mathematical Practices
- Available for mobile devices and tablets



Professional Development Videos

- Videos containing general strategies for teaching concepts and skills
- Available for mobile devices and tablets



Professional Development Performance Tasks Videos

- Videos containing strategies for working with students in solving performance tasks
- Available for mobile devices and tablets



Advanced Implementation Workshops

- For schools looking for follow-up professional development to improve best practices for instruction and applied knowledge
- Professional Development Specialists guide you through Action Planning to ensure your learning goals are identified and met

Professional Learning from Math Solutions



Math Solutions[®]
FOUNDED BY MARILYN BURNS

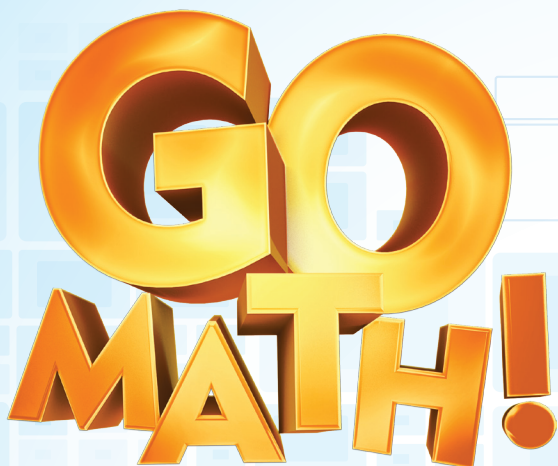
Math Solutions courses and coaching services are available to help teachers take **GO Math!** instruction to a deeper level of understanding.

With a focus on improving math content and pedagogical knowledge, **Math Solutions** instructional experts will provide onsite courses as well as individual and team coaching to meet district goals aligned to state standards.

Onsite courses range from Foundational to Grade-Level Content to Instructional Strategies

Learn more at hnhco.com/matholutions
866.399.6019





GO! Online and take a peek!

Get connected in just five easy steps:

1. Visit **www-k6.thinkcentral.com** and click **Evaluators Click Here**; click **Register**.
2. Enter the access word: **GOMATH15K6** and click **Next**.
3. Enter your contact information and click **Register**.
4. Select a role (e.g., teacher) and click **Login**.
5. Navigate through the Dashboard introduction for access to **GO Math!**.

Program Components

For Students

Write-in Student Edition
Bilingual MathBoard
Grab-and-Go!® Manipulatives Kit

For Teachers

Teacher Edition Chapter Books
Chapter Resource Books
Planning Guide
Grab-and-Go Differentiated
Centers Kit

Cutting-Edge Technology

HMH Player

Personal Math Trainer

Interactive Student Edition (includes
**Personal Math Trainer Powered by
Knewton**)

Student Edition eBook

Student Dashboard

Math on the Spot Videos

Real-World Videos

Virtual Tools

iTools

Animated Math Models

Mega Math

Teacher Dashboard

Teacher Edition Online

Interactive Whiteboard Lessons

Professional Development Videos

Common Core Math Practices

Professional Development Videos

Professional Development

Performance Tasks Videos

Connect with us:



PARCC is a trademark of PARCC, Inc. Knewton™ is a trademark of Knewton, Inc.
CURIOUS GEORGE, created by Margret and H.A. Rey, is copyrighted and trademarked by Houghton Mifflin Harcourt.
Houghton Mifflin Harcourt™, The Leadership and Learning Center®, Personal Math Trainer® and design, HMH Player®, GoMath!®,
Go Math! Academy®, and Grab-and-Go® are trademarks or registered trademarks of Houghton Mifflin Harcourt.
© Houghton Mifflin Harcourt. All rights reserved. Printed in the U.S.A. 04/16 MS175786