

everydaymath.com

# Everyday Mathematics®

## PROGRAM OVERVIEW

## How Children Learn.



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## How Children Learn.

Decades of research shows that true, enduring depth of knowledge requires repeated exposures to key ideas in different contexts over time.

This is how children learn. It's at the heart of *Everyday Mathematics* and has been for over 30 years.

## Research-Based

Everyday Mathematics is developed by educators at the University of Chicago School Mathematics Project (UCSMP). This group is dedicated to helping children learn mathematics using a research-based approach.

*Everyday Mathematics* is the most research-grounded and field-tested elementary mathematics program available today.

- During Everyday Mathematics development, it was field tested at each grade for a full year.
- **800+** students participated in field testing 170 lessons in *Everyday Mathematics* 4.
- Open Response problems as well as Open Response and Reengagement Lessons were field tested by 1,400+ students.





The U.S. Department of Education What Works Clearinghouse<sup>™</sup> recognizes Everyday Mathematics as the most effective core elementary mathematics program in the country. "Our high school algebra scores have gone from 11% proficient in 2004 to 98% proficient this year (2013)."

Diane M., Executive Director of Elementary Curriculum and Support, Bartlesville, OK (users since 2004)

### Research-Proven

There is no better evidence of the program's effectiveness than the children with increased confidence and excitement about math which has led to gains in achievement across the country.

Read some of our success stories at everydaymath.com

## **Engineered for the Common Core**

We've engineered Everyday Mathematics to ensure that your children's learning focuses on the major work of each grade, helping you guide them from foundational work to mastery of each standard.

#### **Goals for Mathematical Content**

Goals for

Each standard has been deconstructed into Goals for Mathematical Content (GMC) making it easy for you to track your students' progress and pinpoint gaps in their knowledge.







2.NBT.5, 2.NBT.7

# Bring Sharper Focus to Your Lessons

The scope of content in each grade is focused to help your students experience the standards more deeply and achieve success.

#### **Expand-and-Trade Subtraction,** Lesson Part 2 **Overview** Children use expand-and-trade subtraction to subtract multidigit numbers. Before You Begin **Common Core** For the Math Message, provide each child with base-10 blocks (10 longs and 10 cubes). **State Standards Focus Clusters** Vocabulary expand-and-trade subtraction Understand place value. Use place value understanding and properties of operations to add and subtract. Warm Up 15-20 min Materials Mental Math and Fluency 2.NBT.5 slate Children solve subtraction problems involving multiples of 10. **Daily Routines** See pages 4–43. See pages xiv-xvii. Children complete daily routines. Focus 35-40 min Math Message base-10 blocks 2.NBT.1, 2.NBT.1a, 2.NBT.5, Children solve a subtraction problem using base-10 blocks. (10 longs and 10 cubes) 2.NBT.7 base-10 blocks 2.NBT.1, 2.NBT.1a, 2.NBT.3, Introducing Expand-and-Trade Subtraction Children use expanded form to help them subtract. 2.NBT.5, 2.NBT.7, SMP2 Practicing Expand-and-Trade Subtraction Math Journal 2, p. 234–235; 2.NBT.1, 2.NBT.1a, 2.NBT.3, Children practice solving problems using expand-My Reference Book, pp. 87–89 2.NBT.5, 2.NBT.7, 2.NBT.9 and-trade subtraction. (optional) 2.NBT.1a, 2.NBT.3, 2.NBT.5 Math Journal 2, p. 234-235; My Assessment Check-In See page 823. Reference Book, pp. 87-89 (optional) **Comparing Subtraction Strategies** Math Journal 2, p. 234-235; slate 2.NBT.1a, 2.NBT.5, 2.NBT.7, Children compare various subtraction strategies. 2.NBT.9, SMP1 CSS 2.NBT.7 Spiral Snapshot GMC Subtract multidigit numbers using models or strategies. to see how mastery develops for all standards within the grade 3 Practice 10–15 min **Playing Beat the Calculator** Assessment Handbook, pp. 98–99 2.OA.2 Game Children practice addition facts. (optional); per group: 4 each of number cards 0–9, calculator, large paper triangle Math Boxes 9-7 Math Journal 2, p. 236 See page 825. Children practice and maintain skills. 2.NBT.1, 2.NBT.1a, 2.NBT.3, Home Link 9-7 Math Masters, p. 266

Homework Children use expand-and-trade subtraction.

#### See the Big Picture

Focus Clusters clarify the standards that are the focus of the lesson.

## Teach with confidence

Each part of the lesson focuses on specific standards so you can be confident your children will achieve the expectations of the CCSS.

#### **Track Mastery**

Time for

Everything,

The efficient 3-part

suggested pacing

lesson structure with

helps streamline your

**Every Day** 

instruction.

Greater focus leads to deeper conceptual understanding and *Everyday Mathematics* makes it easy for you to track your children's progress toward mastery.

## Engineered for the Common Core

## Visualize Coherence

Distributed practice is how children learn best. The Common Core State Standards recognizes this in its call for coherence, for "making connections between topics" and "continually returning to organizing principles." *Everyday Mathematics* recognizes this in the spiral curriculum design. We make it easy for you to see these connections, so you can be confident your children are progressing toward mastery.



## Give Your Students Balanced Rigor

*Everyday Mathematics* gives you the tools you need to help your children confidently meet the high expectations of rigor.

#### **Deepen Conceptual Understanding**

Powerful, research-based activities and small-group work strengthens understanding while helping your children learn to think creatively about math problems.



Activity Cards and games for small-group differentiation supports and extends the focus part of the lesson.

## Ongoing Practice 🔤 Differentiation

#### Games

Advanced English language learners

Games in *Everyday Mathematics* are an essential tool for practicing skills and developing strategic thinking.



#### Help your children develop strong procedural skills and confident fact fluency.

Facts practice can be found in every part of the lesson and in fun games that are tightly integrated into your instruction and encourage your children to practice.

#### Bring math concepts to life and provide opportunities to apply math knowledge every day.

Daily opportunities for problem solving are woven throughout *Everyday Mathematics* in rich activities such as:

- Math Messages
- Math Boxes
- Home Links
- Writing/Reasoning Prompts
- Open Response and Reengagement Lessons
- Exploration Lessons

"Everyday Mathematics makes sure that the students are focusing on what they need at every grade-level, so that as they move through the grades the curriculum is coherent."

> La Toyla J., Instructional Support Leader Chicago Public Schools (users since 2003)

## Give Every Child the Opportunity to Succeed

*Everyday Mathematics* gives you the tools you need to assess your students' progress toward mastery and prepare them for the rigor of the Common Core.

## Assess Daily

Daily assessment opportunities give you a clearer pictures of your children's progress.

#### Assessment Check-In 🚳 1.0A.6, 1.NBT.2, 1.0A.3

Use number-card activities to assess children's counting skills and their understanding of counting principles. Expect most children to be able to represent a number of claps or fingers with the correct number al. Also expect most children to be able to show the correct number of fingers or objects to match a numeral. If they struggle with the count sequence, on-eto-one correspondence, or the cardinal principle, repeat activities from this and earlier lessons, such as Number Stations (Lesson 1-9) and Match Up with Dots and Numerals (Lesson 3-1, Practice).



Every lesson includes Assessment Check-Ins that help you make sure your students are progressing toward mastery every day.

You can easily evaluate your children's work and record your observations to monitor their progress every day.



All assessments in *Everyday Mathematics* can be taken online.

# Prepare Your Students for Success on Common Core Assessments

2-Day Open Response and Reengagement Lessons in each unit give your students opportunities to solve non-routine problems, justify their solutions, and compare solution strategies to prepare them for extended response questions.



On Day 1, your children solve a problem that involves more than one possible strategy or solution.

On Day 2, your children reengage with the problem, defending their own reasoning and critiquing the reasoning of their peers.

### Do More With Unit Assessments

2 Day Unit Assessments provide the opportunity to measure your students' mastery of the focus content of each unit, but they also give the chance to extend your students' learning and reinforce their skills.



Self Assessments allow students to reflect on their understanding of the focus of the unit.

Challenge problems extend important ideas from the unit, allowing students to demonstrate progress beyond expectations.

•	Self Assessn	f Assessment nent Handbook, p. 24		
	WHOLE CLASS SMALL GROUP PARTNER PLOEPENDENT   Children complete the Self Assessment to reflect on their progress in Unit 4. Image: Children of a time when they did each type of problem.			
	Item	Remind children that they		
	1	used paper clips and pencils to measure things in the class (Lessons 4-2 and 4-3)	Unit 4 Ch	nallenge (Optional)
	2	made a bar graph about which super power they would m (Lesson 4-6)	WHOLE CLASS	SMALL GROUP PARTNER INDEPENDENT
	3	learned about addition doubles and played <i>Roll and Recor</i> (Lesson 4-7)	Children can cor Unit 4 Assessme	nplete the Unit 4 Challenge after they complete the nt.
	4	found combinations of 10 and played Fishing for 10. (Lessons 4-8 and 4-9)		
	5	wrote and solved number stories about school supplies th three numbers. (Lesson 4-10)		
	6	used a number grid to find 10 more and 10 less than a nun What's Your Way? (Lesson 4-11)		
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## Give Every Child the **Opportunity to Succeed**

Provide each of your children the support they need to master the Common Core State Standards.

## **Clearly See What Your Children** Should Know at Each Point in the Year



Mastery expectation statements appear in every unit organizer.

Goal for	Not Meeting	Partially Meeting	Meeting	Exceeding	
Mathematical	Expectations	Expectations	Expectations	Expectations	
Practice GMP3.1 Make mathematical conjectures and arguments.	Provides no argument for whose measurement is best, or provides an argument that does not relate to effective measurement techniques.	Provides a partial argument for whose measurement is best that refers to some, but not all, of the following: same-size units, no gaps, and no overlaps.	Provides an argument for why Rodrigo's measurement is best that refers to using same-size units without gaps and without overlaps.	Assessment Ch Math Journal 2, p. 230 Expect that most children will be numbers on journal page 230 in	e able to correctly write the 3-digit expanded form and compare them

Easy-to-use rubrics at point of use help you determine whether or not your children are progressing appropriately.

> Each lesson's Assessment Check-In includes a mastery expectation statement as well as guidance about what to look for to help you differentiate.

the 3-digit numbers, have them build the numbers with base-10 blocks first. Some children may be able to correctly write the expanded form

for the 4-digit numbers and compare them.

comparing



# Differentiation Guidance and Support is Always at Your Fingertips



Point of use instructional guidance within each lesson help you easily identify common misconceptions and adjust immediately.

"It's been my experience that while all students in the Everyday Mathematics program improve in math, the most dramatic growth is experienced by lower achieving students.... We see lower achieving students double their progress during the school year."

Deb B., 4th Grade Teacher and recipient of the Presidential Award for Math and Science Teaching, York School District, ME (users for over 20 years)

## Adapts to Fit Your Classroom

Whether you prefer using print resources, you're ready to go fully digital, or you're somewhere in between, *Everyday Mathematics* has the resources to meet your needs.



### INTRODUCING THE ConnectED Teacher Center

#### **Always Accessible**

Plan and deliver instruction and assessments on any device.

#### Plan and Differentiate with Confidence

Use monitoring tools to review student performance and provide appropriate support.

#### **Real-time Feedback and Reporting**

View, respond, and evaluate student work in real-time for both auto-scored and authentic assessments. Reports are available at the student, class, school, and district levels.

### "I like learning with Everyday Mathematics. It really gets to the heart of things."

Keri C., 4th Grade Student



### INTRODUCING THE Student Learning Center

#### Interactive Learning Every Step of the Way

Students interact with digital versions of nearly every lesson activity, including Math Journals and assessments.

#### **Support for Family**

EM at Home makes it easy for families to help their child with access to lesson resources and more.

#### A Toolbox of Support

Digital manipulatives, Geometer's Sketchpad® activities, and tutorial animations are embedded at point-of-use to aid in completing assignments, activities, and assessments.

## Adapts to Fit Your Classroom

New standards. New assessments. Teaching mathematics can seem overwhelming. That's why *Everyday Mathematics* gives you the tools and professional development support you need to teach with confidence every day of the year.

### Support Delivered When You Need it

The mathematical background information you need to deliver lessons with confidence is included in every Unit Organizer. Support is extended for many lessons with Professional Development notes related to the content of that lesson.





## Collaborate Anywhere, Anytime

The Everyday Mathematics Virtual Learning Community (VLC) gives you're the chance to share ideas, view videos of lessons, alongside opportunities to interact with Everyday Mathematics authors other users, and much more!

Community support, run by the University of Chicago.

### In Person Training Delivered to Your School

Receive implementation support from our experienced trainers, all of whom have taught *Everyday Mathematics* for at least 2 years.





"There are these amazing dialogues going on in the classes... I'm amazed at the types of connections that they're starting to make."

Amina A., Assistant Principal, Alexandria, VA

**GESS** Engineered for the Common Core



Everyday Mathematics. How Children Learn.

- Fully digital options that adapt to your classroom
- Gives each student the opportunity to achieve
- Connects math to the world outside the classroom

Learn more at everydaymath.com

