

SAVVAS

Program Overview
Grades K–8

Experience Math™

The best way to learn is
through experience.

Experience Math™

Experience Math™, a student-centered K–8 program, celebrates the art of teaching combined with the power of an engaged classroom. Through simple planning and high-value, in-the-moment professional learning, *Experience Math* allows teachers to do what matters most:

Strengthen Learning through Intentional Teaching

Gather Evidence of Learning through Purposeful Assessment Strategies

Establish Fluency through Practice and Game Play

Create Community through Discovery and Exploration

Developed by Dr. Marian Small

Dr. Marian Small, internationally renowned mathematics educator, author, and professional learning consultant, designed this program to share her mathematical knowledge and insights with every classroom and support intentional teaching through thoughtful questioning.



Thoughtful Teaching through Thoughtful Questions

Marian, your personal instructional partner, helps you ask thoughtful questions that:

- Focus on highlighting the most important math ideas
- Develop mathematical thinking skills and deep understanding of math in your students
- Make informed decisions with embedded instructional insights
- Concentrate on how to adapt instruction to your student needs with simplified planning

Contributing Author Graham Fletcher

Graham Fletcher has served as a classroom teacher and math instructional lead, and he is currently a math specialist. Graham continually advocates for best practices in elementary mathematics to support students and teachers in their development of conceptual understanding.

Graham Fletcher, as a contributing author, adds his guidance and expertise to:

- **Wonder Tasks and Making Connections Tasks**, which are activities that help students practice and apply problem-solving skills
- **Developing fluency through coherent pathways** within the program using key features such as Number Talks and Games



An Active Learning Experience

Experience Math™ is built on the following principles to facilitate student exploration and learning through action.

Designed around Essential Understandings

Experience Math is designed with a focus on essential understandings, or big ideas, to help students build meaningful connections in math.

Built on Student-Centered, Rich Tasks

Experience Math increases student engagement by infusing rich tasks as the main driver of learning in each lesson.

Centered on Hands-On Learning

Experience Math encourages a hands-on learning approach to support exploration and the development of conceptual understanding.

Focused on Developing Critical Thinking

Experience Math deepens critical understanding to help students make sense of math concepts and build problem-solving skills.

Facilitated through Intentional Teaching

Experience Math improves student-centered learning with intentional teaching that is aligned with clear learning goals and strategic instructional decisions.

Develop 21st-Century Skills Naturally

Student-centered instructional design emphasizes teamwork, communication, and skills needed to succeed as citizens in the 21st century. *Experience Math's* lesson design supports the development of the following:

- Collaborative Problem-Solving
- Creativity
- Hands-On Learning
- Critical Thinking
- Written and Oral Communication Skills
- Leadership Skills
- Cultural Awareness and Acceptance
- Personal Responsibility and Initiative

Establish an Environment for Thinking and Exploration

Classroom norms and routines are critical to establishing a learning environment where students drive learning through critical thinking and problem solving. Marian Small helps you foster a productive learning environment in the beginning of the year topic to lay the groundwork for eliciting student thinking and participation throughout the school year.



Creating a Foundation for Lifelong Learning in Kindergarten

How math is defined in kindergarten lays the foundation for how students view math throughout their lives. The kindergarten program in *Experience Math™* celebrates students' natural curiosity while building a strong foundation.

Play-Based, Guided Inquiry

Topics within *Experience Math's* kindergarten program feature **Explorations** and **Lessons** to help teachers address standards in a play-based environment.



Lessons

Lessons suggest planned experiences to ensure that standard expectations emerge in a natural context.

Variations of each activity are suggested, so similar activities can be repeated regularly throughout kindergarten.

Explorations

Explorations are provided to suggest ways teachers might respond to student-initiated inquiries and curiosities.

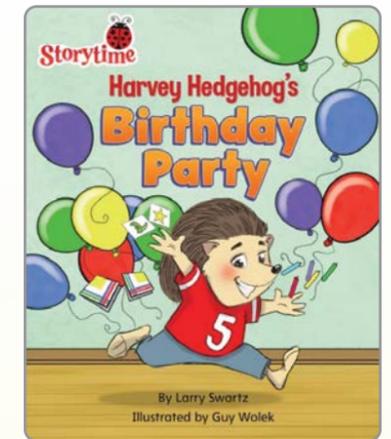
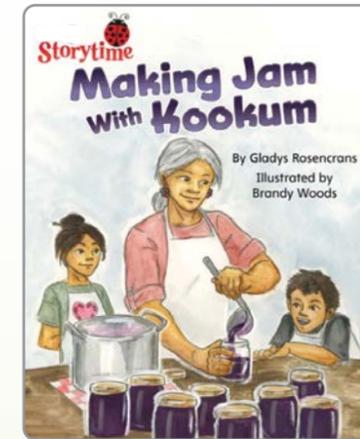
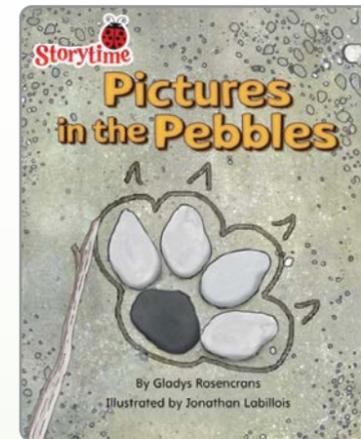
Suggested centers facilitate ongoing student exploration.



- Which plate has more gummy worms? How do you know?

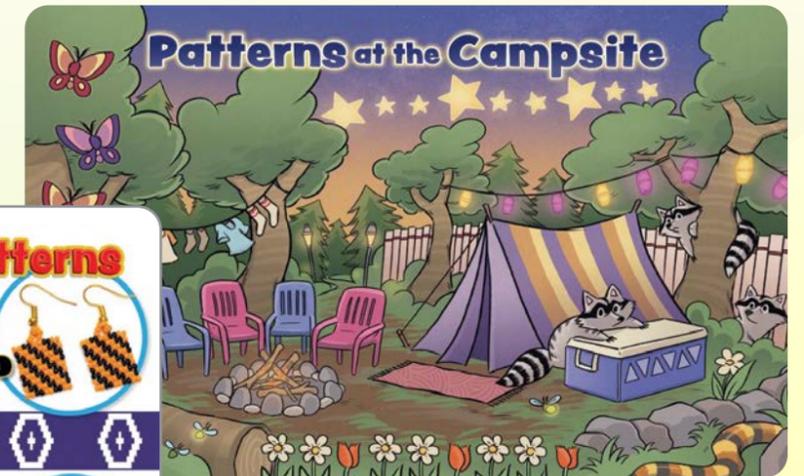
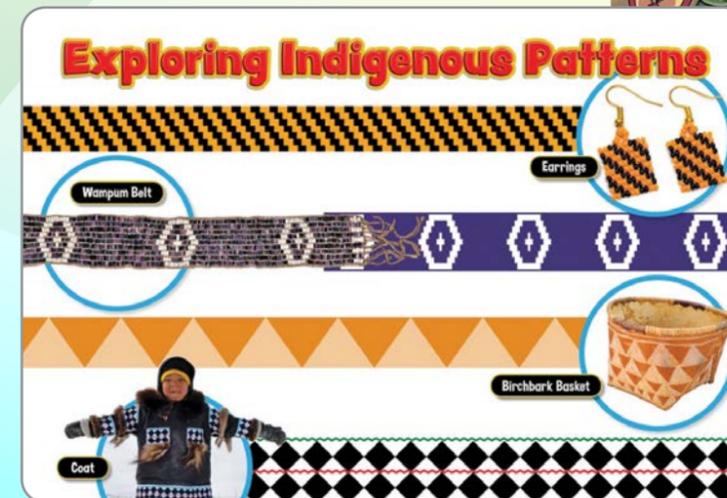
Encourage the Sharing of Ideas through Stories

Projectable Storytime Books can be used to promote inquiry, introduce mathematical concepts, and encourage the sharing of ideas.



Celebrate Curiosity through Posters

Projectable Posters support planned and sample inquires, providing strong visuals to foster curiosity through rich notice-and-wonder discussions.



A 3-Part Lesson Designed for Action

Experience Math™ features a three-part lesson model that encourages students to be active mathematical thinkers and problem solvers.



Scan for a lesson walkthrough



Built on Essential Understandings

Learning Goals are derived from standards-based essential understandings. **Success Criteria** help students accomplish their learning goals.

PART 1: Minds On



A short activity activates prior knowledge and engages student curiosity.

PART 2: Action



Students use critical and creative thinking to solve a new problem cooperatively.

PART 3: Consolidate



Questions bring out the main ideas of the lesson through discussion and reflection. Exit Tickets help teachers gauge student understanding.

Marian's Insights

As your personal coach and partner, Marian Small has embedded her own instructional insights, including mathematical contexts, differentiation strategies, and implementation tips, throughout the lesson.



> PART 1: Minds On

Minds On is a 10-15 minute discussion often based on an open question intended to:

- Activate prior knowledge
- Engage students in critical and creative thinking
- Prepare students for the Action Task



Scan to learn more about Open Questions

Lesson 20-4: Solving Multiplication Problems

Minds On Activity



This baby dolphin weighs 48 pounds.

1. Use this information to make a multiplication problem about the dolphin.
2. What makes your problem a multiplication situation?

Engage All Students through Open Questions

Open Questions encourage a “low floor, high ceiling” discussion that invites all students to connect to prior learning and communicate mathematically.

Connecting Ideas and Experiences

Students are invited to share how their own experiences and ideas connect to the question, enriching the conversation and learning while developing students’ cultural awareness.

Marian's Minds On Insights

- **And the Point Is ...** : information on the mathematical purpose of the activity
- **Solutions and Strategies:** support for facilitating open-ended discussion
- **Professional Learning Video (for many Minds On activities):** relevant insights on the lesson concept
- **Connect Ideas and Experiences for some lessons:** suggestions for connecting the concept to students’ own experiences

> PART 2: Action

The main part of the lesson, Action, engages students in a rich task to develop, use, and share various strategies to solve a problem in a small group or pairs.

Hands-On

Students utilize manipulatives, graphic organizers, and other visualization tools to build conceptual understanding.

Multilingual Learners

Instructional scaffolds are embedded to help students understand vocabulary, ideas, and concepts in context.

Lesson 20-4: Solving Multiplication Problems

Action Task



The students in Aidan's class read 124 books in one month. The class goal is to read a total of 3 times that many books by the end of three months.

1. How many more books will they have to read over the next two months? Explain your thinking.

Intentional Teaching

Using strategic questioning, teachers help concentrate the learning on the important concepts students should understand at the end of the lesson.

Marian's Action Insights

- **And the Point Is ...** : notes that provide information about the purpose of the task
- **Differentiating Instruction:** suggestions for Parallel Tasks to support students who need more support or more challenge
- **What Could You Do If ...** : specific strategies for addressing common misconceptions and errors
- **Sample Student Responses and Strategies**



Scan to demo a coaching video

> PART 3: Consolidate

The most critical part of the lesson, Consolidate, features questions that allow students to:

- Draw out the main mathematical ideas from the Action Task
- Make connections and communicate their own learning

Lesson 20-4: Solving Multiplication Problems

Consolidate Questions



1. Why might you have solved Action Task Question 1 using only multiplication or using multiplication and subtraction?

Student-Driven Learning

As a community, students communicate their strategies with each other as teachers highlight the most important ideas to take away from the lesson.

Consolidation Sharing Routines

Sharing is often done in small groups rather than with the full class. Frequent routines include:

- **Math Congress:** Students view a sample of student work examples, justifying or critiquing their reasoning.
- **Gallery Walk:** Students view, observe, and reflect on each other's work.
- **Student Sharing:** Students share their work to build self-assessment skills through constructive analysis and reasoning.

Marian's Consolidate Insights

- **And the Point Is ...** : information about the mathematical focus of the Consolidate Questions
- **Assessment for Learning:** guidance about what to observe and suggestions for reteaching
- **Sample Student Responses to the Consolidate Questions**

Practice and Application

After Consolidate, Your Turn offers students the opportunity to work independently or in pairs to practice and apply the lesson learnings.

Offered in both print & auto-scorable digital formats.

Your Turn Questions

Purposeful practice engages students in both procedural and conceptual practice for Grades 3-8. Mathematical Practices are employed throughout to build student confidence and revisit key terminology.

Name _____ Date _____

Your Turn Questions

1. At the end of the day, a bank teller counted up the cash in her till. There were 384 \$5 bills and some \$10 bills, totaling \$2,500. How many \$10 bills are there?
 (A) 58 (B) 442 (C) 580 (D) 1,920

2. Reason Carissa's dad is turning 45 years old today. How many weeks old is he?

3. There are about 6 paragraphs on every page of Sam's 247-page book. How many paragraphs could there be in the book?

Find the sales tax.

Sales Tax		
Selling Price	Rate of Sales Tax	Sales Tax
\$60.00	5.25%	?

Use the percent equation, $\text{part} = \text{percent} \times \text{whole}$, to find the sales tax.

Step 1 of 8

Additional Practice

Extra practice opportunities are provided to support every lesson in both printable and digital formats.



Supporting Activities

In Grades 1 and 2, Supporting Activities are provided for student practice and learning:

- Assessment for Learning activities
- Reteaching activities
- Teacher-led activities
- Independent activities and centers

Purposeful and Engaging Games

Games and puzzles are offered strategically within Your Turn allowing students to:

- Engage in meaningful practice of mathematical skills concepts
- Think creatively and critically while having fun
- Exercise perseverance and a positive attitude
- Develop behaviors needed to cooperate and collaborate with others

Hands-On Games

Pattern Path

And the Point is ...
This game provides students with practice copying and extending patterns.

What You Need

- Assembled Pattern Path Game Board (with side A and side B glued together)
- Pattern Path Spinner
- Paper clip and pencil
- Pattern blocks
- Counters
- Variety of materials (e.g., pompoms, linking cubes, counters) to make patterns (optional)

How to Play
Students can play in small groups and take turns. Provide each group with the assembled Pattern Path game board, the Pattern Path spinner, a paper clip and a pencil (to spin the spinner), and pattern blocks.

1. One player spins the Pattern Path spinner to choose a pattern to create. All players work together to determine the pattern core (the part of the pattern that repeats).
2. Players take turns placing pattern blocks to show a repetition of the pattern core on the game board.
3. The player who places a pattern block on the moon gets 1 counter.
4. Students can play again, switching who goes first. The player with the most counters wins!

Other Ways to Play

- Students can play again and use other materials (such as pompoms, linking cubes, or counters) to represent the pattern in a different way.
- Students can play the game on a different pattern path.

Pattern Path (continued)

Example
Berto spins the Pattern Path spinner to choose a pattern.

All players take turns placing pattern blocks on the game board to show another repetition of the pattern core.

Berto places a red trapezoid pattern block on the moon, so he gets a counter!

Digital Games

Crack the Code

Order each set from least to greatest. What's the word?

287 732 689 875 56
I I G T D

_____ 775 _____
_____ T _____

423 523 616 314 513 660 606 413
T M T E I E A S

_____ _____
_____ _____

217 89 23 941 789
U O R D N

_____ _____

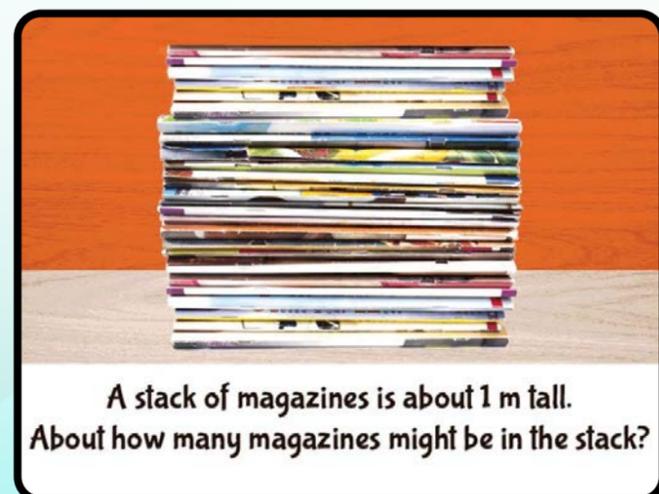
Hands-On Puzzles

Developing Fluency through Anytime Activities and Routines

Strengthen Number Thinking and Reasoning

Number and Data Talks are 5-10-minute activities that:

- Support students' fluency and flexibility in thinking about numbers and operations
- Encourage students' use of their own problem-solving strategies



Solidify Mathematical Language

Academic Language Activities provide opportunities to build understanding of critical words needed to communicate mathematical ideas and understandings.

Number Talk

You had a small collection of shells. Then you went to the beach and got more shells.

Now you have 72 shells.

Decide how many shells you had in the beginning. How many did you find at the beach?

Encourage Creative Modeling and Problem Solving

Brain Benders are engaging, often open-ended questions that encourage creative problem solving in the real world. Students:

- Decide the appropriate model for a real-life situation
- Consider what assumptions they are making about the problem
- Use the model to answer a real-life question

Academic Vocabulary

relate
To find a connection with something.

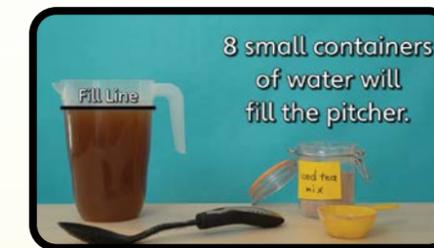
Relate the number of rabbits to the number of carrots.

Student-Driven Application

Inspire Problem Solving through Student Curiosity

Wonder Tasks are three-act, problem-based activities that challenge students to come up with the question to be solved and communicate their mathematical thinking and understanding.

Developed with **Graham Fletcher**



- **The Hook**, which provokes learners to ask questions about a real-life situation and discuss what they notice and wonder.
- **The Struggle**, where information necessary to answer the question is revealed. Then, students estimate, calculate, and arrive at a solution.
- **The Reveal**, which provides an opportunity for students to reflect and check their thinking and answer.

Carnival Tickets

Every 3rd student gets a ticket to a carnival ride.
Every 4th student gets a ticket for a game.
There are 50 students.

- Which students get only a ride ticket?
- Which students get only a game ticket?
- Which students get both?

Show your thinking.

Explain why not all students get tickets.

Connect Mathematical Ideas through Application

Making Connections Tasks are designed to integrate concepts from multiple mathematical domains by:

- Providing additional opportunities to revisit and build important connections
- Requiring students to apply mathematical skills and concepts they have learned
- Asking students to solve complex problems with multiple parts

Gather Qualitative and Quantitative Evidence of Learning

Experience Math™ provides a variety of tools to help you plan Assessment for Learning, Assessment as Learning, and Assessment of Learning for each topic and lesson.

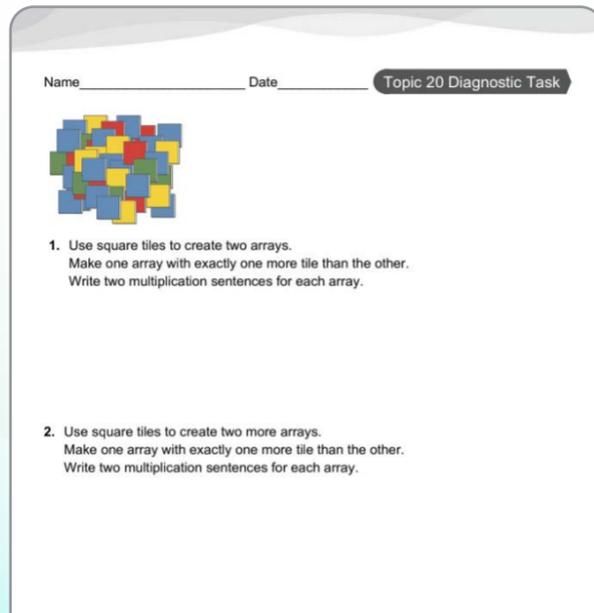
Assessment for Learning—Observe Learning During Instruction

Each topic provides the following:

- Diagnostic Task
- Observational Assessment Checklist
- Math Anytime Activities (Number Talks, Data Talks, and Brain Benders)

Each lesson provides the following:

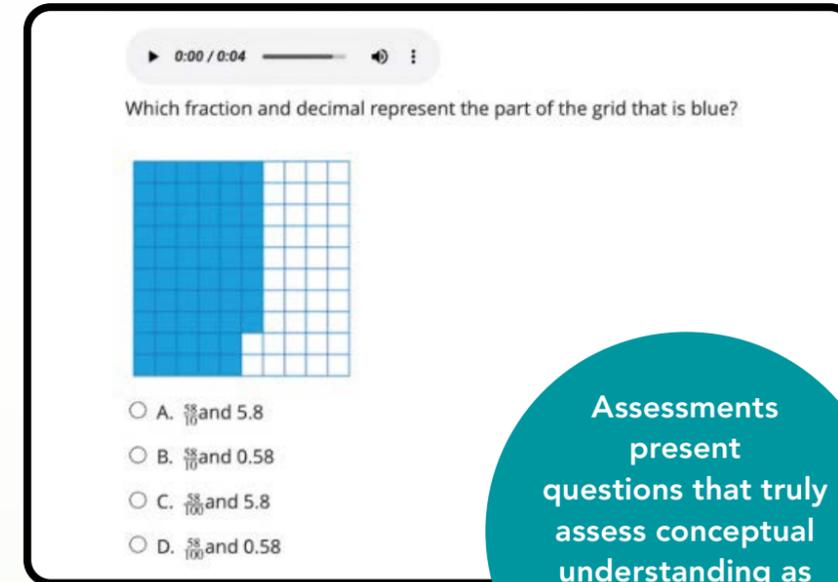
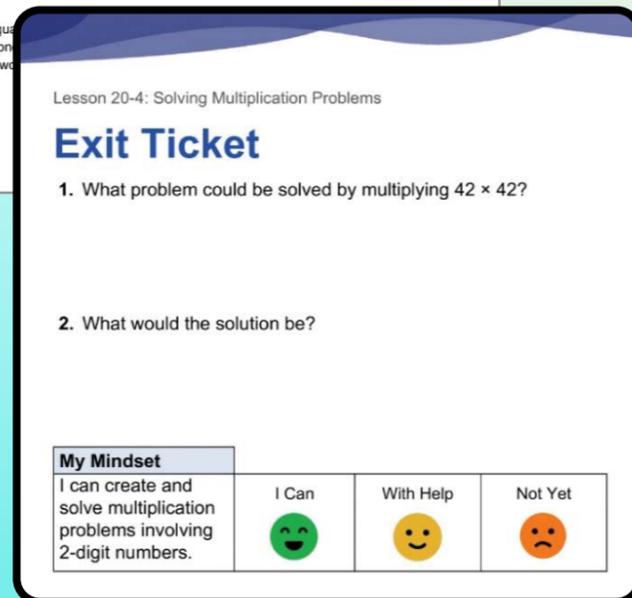
- Learning Goals
- Minds On Activity
- Consolidate: Assessment for Learning
- Exit Ticket
- Games and Puzzles
- Supporting Activities: Assessment for Learning (Grades 1- 2)
- Your Turn Questions (Grades 3-8)



Assessment as Learning—Students Reflect and Self-Assess

Each lesson provides the following:

- Learning Goals & Success Criteria
- Your Turn: What You Learned
- Exit Ticket: Self- and Peer-Assessment



Assessments present questions that truly assess conceptual understanding as well as skill proficiency.

Assessment of Learning—Informs Reporting

Each topic provides the following:

- Observational Assessment Checklist (all topics)
- Assessing Concepts and Skills (all topics)
- Parallel Assessment (for many topics, as relevant)
- Performance Task

Editable Printable and Digital Formats

Formal assessments are offered in both an editable, printable format as well as an autoscorable, assignable format.

Additional Solutions to Support Math in Your School

SAVVAS math Screener & Diagnostic Assessments

Norm-Referenced Assessment Suite

The *Savvas Math Screener and Diagnostic Assessments* provides efficient and norm-referenced assessments integrated with *Experience Math* on Savvas Realize®. Diagnose student needs, monitor progress towards year-end proficiency, and inform instruction.

successmaker®

Personalized Learning through SuccessMaker Math

For connected learning support, *SuccessMaker® Math* is a K-8 adaptive personalized learning program effective for differentiation, acceleration, and intervention. This flexible, proven solution adjusts to learning needs in real time to support a year of growth in 20-minute sessions, three times a week.

Efficiently Manage Qualitative and Quantitative Data

Savvas Realize® Scout: Observational Assessment Tool

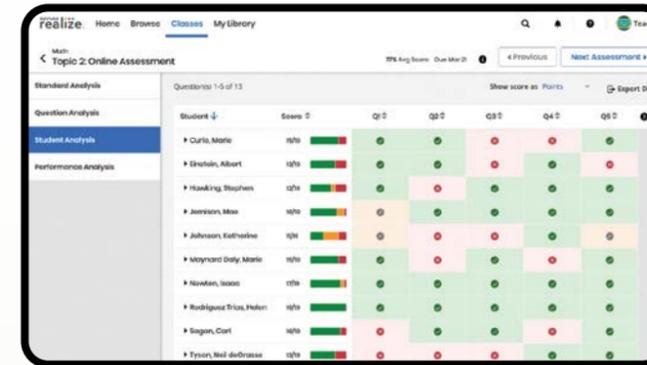
Realize Scout helps teachers document in-the-moment student learning directly on the Realize digital platform. Key observations are noted within the Scout tool to help inform instruction.

- Snap photos, record observations and class discussions, and make anecdotal notes while creating a detailed picture of individual student growth over time.
- Share these observations with families at parent-teacher conferences.
- Use these observations to inform evaluation and lesson planning.
- Store and organize collected media to validate observations on the spot, for every student.



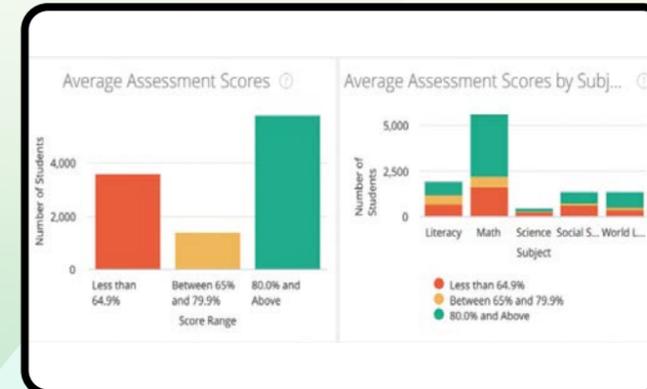
Realize Reporting

Teachers can instantly access student and class data reports that show assessment scores and mastery of standards, overall progress, and the amount of time students have spent on their work.



Results by Assignment

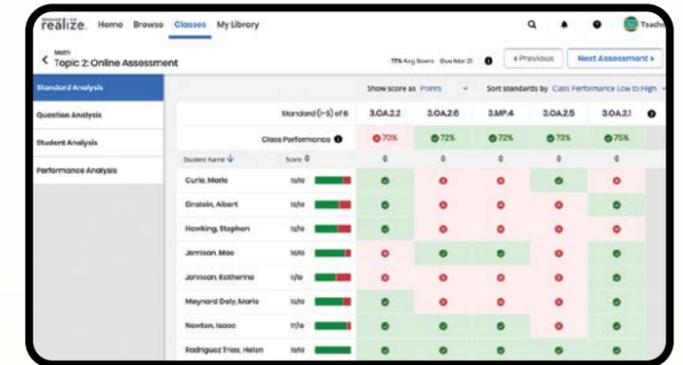
You can view the assignment details and status and the average score for each assessment and assignment. Assignment data includes **item analysis, student analysis, and suggested groupings.**



Administrator Dashboard

The Savvas Realize administrator dashboard provides real-time visibility into district-, school-, and student-level performance, including:

- Scores by Standard
- Cumulative Scores by Standard
- Assessment Scores
- Assessment Item Details



Standards Progress Report

Real-time data reports display standards mastery for your class and individual students over time.



Vertically Scaled Scores

With **Savvas Math Screener and Diagnostic Assessments**, teachers and administrators can monitor national percentile and year-to-year progress through independent, vertically scaled scores.

One Place to Plan, Prep, and Teach

Teachers access one, curated digital center on Savvas Realize® from which to plan, prep, and teach *Experience Math™*. Everything needed for each lesson is provided at point of use on organized lesson pages.



See an overview of the Teacher Digital Experience

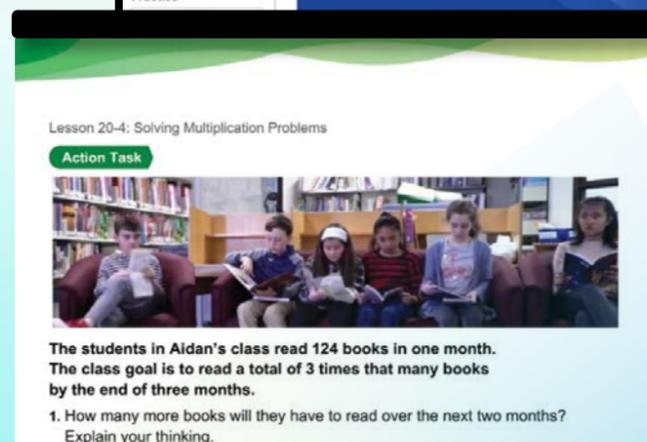
Plan For Upcoming Lesson

- Topic and Lesson Planning to easily review pacing, objectives, standards, and mathematical contexts
- Embedded professional learning through Marian's coaching videos, instructional supports, and questioning strategies
- Review student data to adjust lesson plans



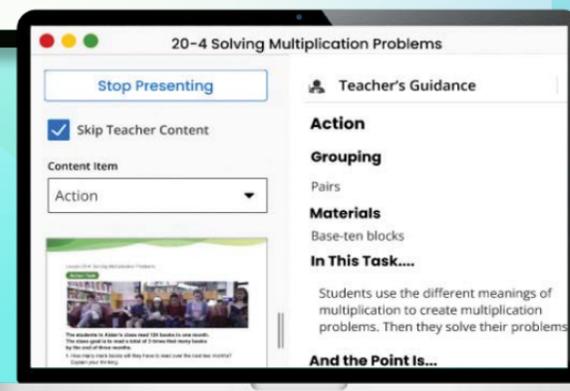
Prep Print and Digital Materials

- Assign interactive lesson activities, practice, and/or assessments
- Print or duplicate learning aids, activities, or assessments
- Download and/or customize lesson presentations and materials as needed or for offline use



Project and Teach from One Device

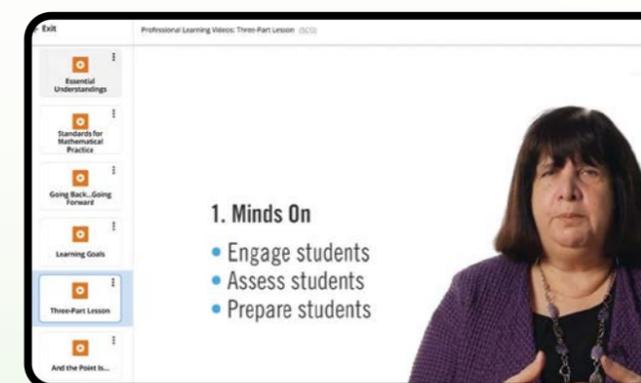
With **Presentation Mode**, teachers can project the lesson presentation and materials on a projector while referencing their instructional supports from their device.



Getting Started

Teachers have access to on-demand, comprehensive program overview materials to get started with *Experience Math*, including:

- Professional Learning Videos
- Getting Started Videos
- Content and Implementation Guide
- and more!



M Magazine

M Magazine is an online math magazine, created by Marian Small, dedicated to empowering math educators across the country. Every issue is filled with helpful features, including: videos, demos, shareable activities, and exclusive content to inspire the best possible learning experiences.



Easily Integrate with Your District's Systems

SAVVAS realize Integrations

Rostering Tools	Student Information System	Productivity Tools	Learning Management System
ClassLink	Aeries	Google Drive	CANVAS
ONEROSTER	Infinite Campus	OneDrive	Buzz
And Many More!	PowerSchool	Google Classroom	Schoology
			SAFARI MONTAGE

Certifications

- ISTE PLEDGE
- 1EDTECH CERTIFIED
- Google for Education Partner

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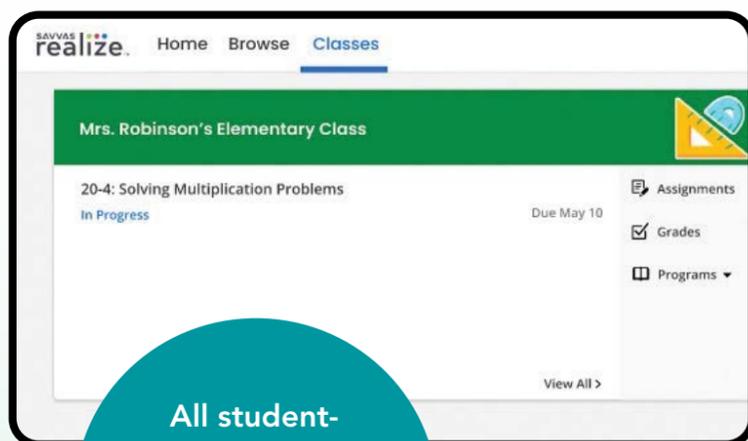
Blended, Engaging Student Materials

Digital Student Experience

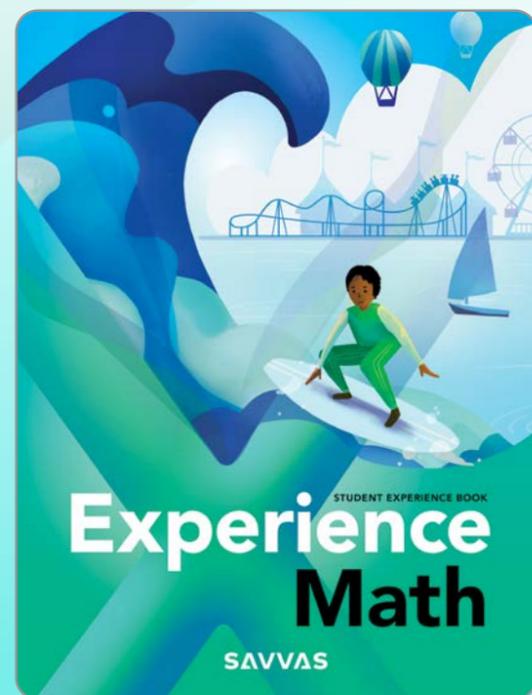
Designed with young learners in mind, students can access *Experience Math™* digitally through Savvas Realize®, including:

- Lesson materials and content
- Interactive assignments
- Digital practice with embedded learning aids
- Auto-scored assessments
- Engaging games for ongoing practice
- and more!

Students can easily experience and document their learning by using their digital access and keeping a math journal.



All student-facing content, print and digital, is available in Spanish.



Student Experience Book

The optional Student Experience Book provides:

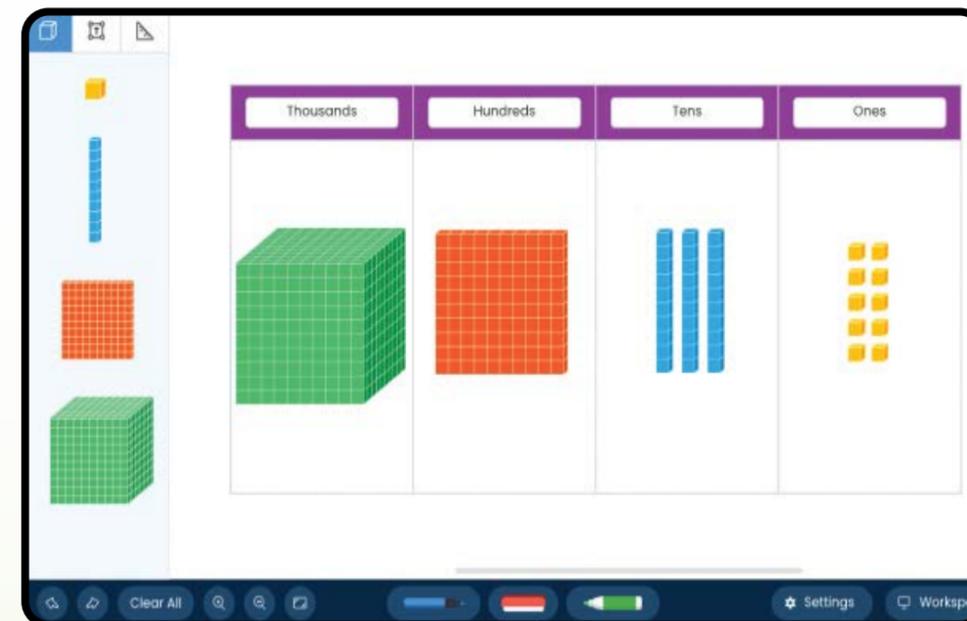
- Support for student work in the Action Task
- Journal prompts for lesson reflection
- Your Turn practice questions for lesson and topic

Classroom Manipulatives

Each grade level includes a curated classroom manipulative kit to support *Experience Math* lessons.

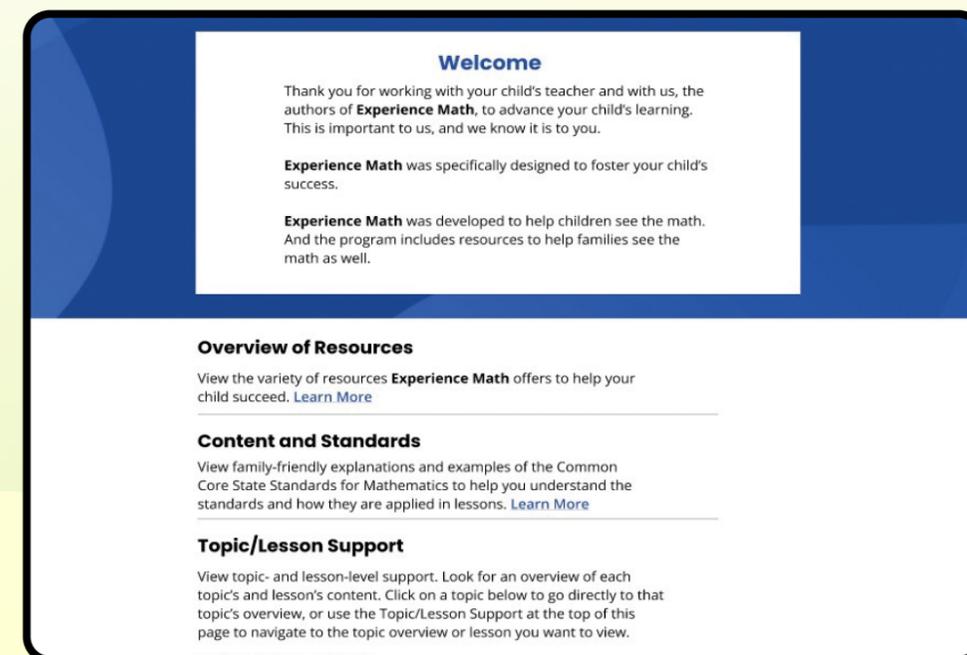
Brainingcamp Virtual Manipulatives

Engage your students and bring math to life! Improve your students' conceptual understanding with embedded Brainingcamp visual and interactive math tools. View student work in real time and share your screen or student screens with the class.



Support at Home with Family Engagement

Easily accessible resources that are compatible with Google Translate™ provide family-friendly topic and lesson-level support. Interactive videos, vocabulary review, and helpful search terms engage students at home—no login required!



Experience Math™

The best way to learn is
through experience.

[Savvas.com/Experience-Math](https://www.savvas.com/Experience-Math)

SAVVAS
LEARNING COMPANY

Savvas.com
800-848-9500

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