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Florida's B.E.S.T. Standards

Florida Reveal Math for grades K–5 not only aligns with Florida's B.E.S.T. standards but will transform the way your students think about mathematics by developing a growth mindset and emphasizing the development and application of critical problem-solving skills.

Motivate Students 03

Motivate students with purpose and confidence that mathematics goes beyond the "right" answer. Discover how *Florida Reveal Math* K–5 can help you create a classroom community that focuses on growth mindset, where all students can engage with math as they apply what they are learning to real-world situations and reach higher depths of knowledge.

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#### Review Florida Reveal Math Online

my.mheducation.com | Teacher UN/PW: flrevealk5 | Student UN/PW: flrevealk5se



Elevate Learning
Elevate learning and encourage students to ask "why" or "how" using facilitation over direction. Learn how <i>Florida Reveal Math</i> will help you solidify understanding through exploration driven by student curiosity as they effectively demonstrate what they know and what they want to learn.
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Achieve success as you plan and teach with confidence using actionable data and essential assessment insights to inform instruction and reveal the potential in every student. Find out how <i>Florida Reveal Math</i> can help you meet the needs of all learners with flexible and effective instructional resources.
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Differentiate Based on Data
Instruction Informed by Experts
Easily Plan Lessons and Teach with Confidence

# **Designed to Meet** Florida's B.E.S.T. Standards

With Florida's Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards for Mathematics as the center of development, Florida Reveal Math is designed to ensure all students can access rigorous content through high-quality instruction and become doers of mathematics.

#### 1. Benchmarks

Each lesson lists the Benchmark of Focus and the Connecting Benchmark(s).

### 2. Mathematical Thinking and Reasoning Mathematical Thinking and Reasoning Standards are integrated into every lesson.

#### 3. Lesson Objectives

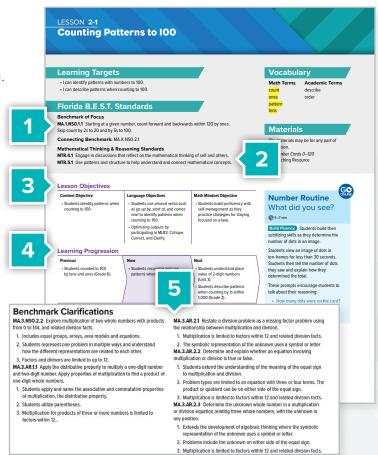
Each lesson has clear and concise objectives and focus.

#### 4. Learning Progression

Learning Progression shows both horizontal and vertical progressions.

#### 5. Benchmark Clarifications

Benchmark Clarifications within the Unit Overview provide clarity.



# Math is... Modeling

What is another way to represent 3 groups of 6?

#### Mathematical Thinking and Reasoning

Integrated into every lesson, Math is... prompts help students self-monitor and apply mathematical thinking and reasoning skills to the problem-solving process.

# Math is... **More Than Just Numbers**



Florida Reveal Math looks to encourage students to see themselves as doers of mathematics. The first unit in each grade, the **Math is... Unit**, is designed to encourage all students to:

### Understand that their math story is ongoing.

In this first lesson, students will:

- Develop a growth mindset.
- Take ownership of their math story.

### Develop mathematical thinking and reasoning.

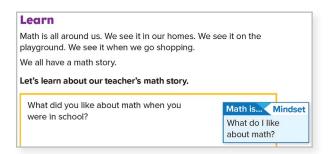
In Lessons 2 through 5, students will:

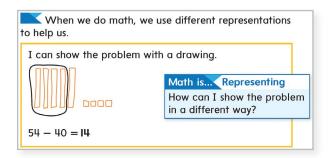
- Develop their Mathematical Thinking and Reasoning Skills.
- Communicate about and apply these skills to the problem-solving process.

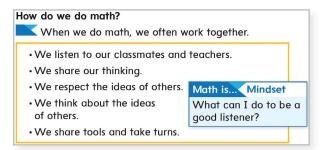
### Create a collaborative classroom community.

In Lesson 6, students will::

- Develop a voice and choice in their classroom environment.
- Establish classroom norms of interaction.











Written by contributing authors Linda Gojak and John SanGiovanni

# Create an Equitable Classroom

Florida Reveal Math emphasizes a positive and productive classroom and supports conscious lesson planning for all students.

Florida Reveal Math supports an equitable classroom through:

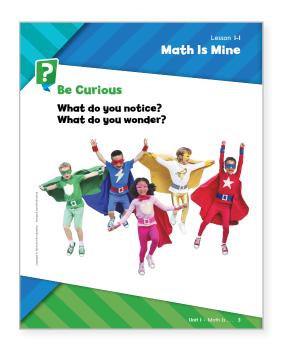
- Achievable academic goals.
- Instructional focus on exploration, discourse, and sense-making.
- Lesson access points for all students to participate.
- Multiple representations to promote understanding.
- Comprehensive language supports to access the language of mathematics.
- Embedded scaffolds and supports to promote common access to rigor for all students.
- Data-driven instructional choices.
- Multi-modal differentiation.



#### Math is... Mindset

What makes you feel confident about your work today?

Florida Reveal Math identifies clear objectives to support students' development in understanding the math content, communicating confidently about mathematics, and approaching problem-solving with a growth mindset.



# **Build Shared Language**

Florida Reveal Math was developed around the belief that mathematics is not just a series of operations but a way of communicating—listening, speaking, reading, writing, and most importantly, thinking. As a result, all students can benefit from support designed to develop and promote the use of mathematical language.



#### Math Language Development

Feature offers insights into one of the four areas of language competence—reading, writing, listening, and speaking.



#### **English Learner Scaffolds**

Based on WIDA levels and help students understand math vocabulary, ideas, and concepts in context.



### Language Development

Graphic organizers, tools, and tips for building students' academic and math vocabulary within each lesson.



### Language of Math

Promotes the development of key vocabulary terms that support how we talk about and think about math in the context of the lesson.

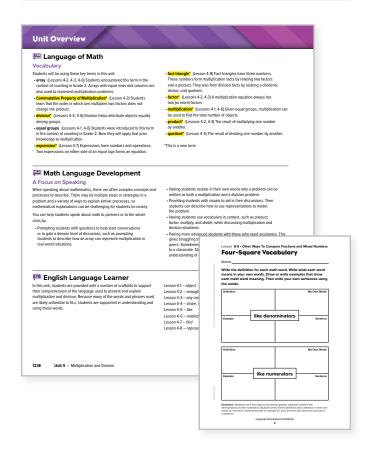


#### **Math Language Routines**

Occur in every lesson to promote the use of mathematical language.

### Language Objectives

Identifies a linguistic focus of the lesson for all learners.



### **Make Real-World Connections**

### STEM-Focused Units

Each unit highlights a STEM career and shows real-world applications of math to help students see math as a tool to explore the world around them. The STEM Career Kid video introduces a STEM career, and the Math in Action video applies the unit's math content to real-world situations.





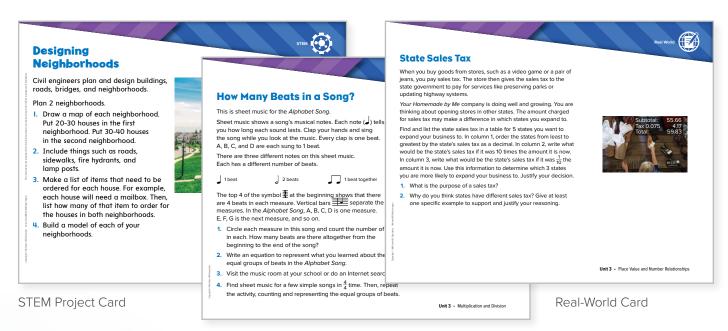
Within **STEM Adventures**, students engage in experiments with the STEM Career Kids, make hypotheses, and apply mathematical knowledge to analyze the data.



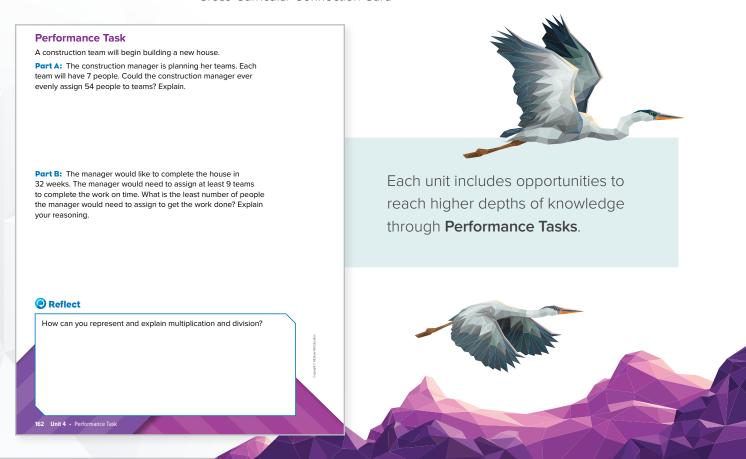
Real-world STEM connections are woven throughout *Redbird Mathematics*, making math relevant for students. Many topics conclude with a digital STEM project.

### Rigorous Application of Math

Every unit provides three in-depth Application Station Cards that help students extend their thinking and work at higher depths of knowledge as they connect the unit content to real-world examples:



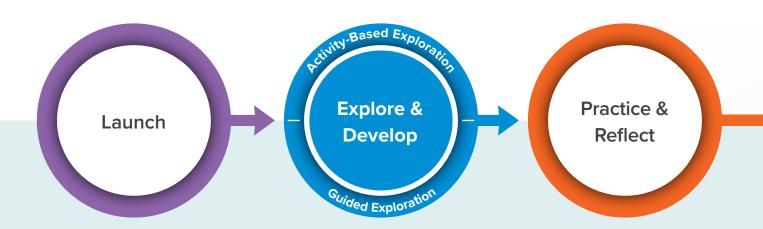
#### Cross-Curricular Connection Card





# **Utilize a Flexible Lesson Model**

The Florida Reveal Math lesson model keeps sense-making and exploration at the heart of learning. Every lesson provides two instructional options to develop the math content and tailor the lesson to the needs and structure of the classroom.



Teachers facilitate student conversations with the Be Curious activity to spark mathematical thinking and curiosity.

Teachers encourage student exploration through either the Guided Exploration or **Activity-Based Exploration to** foster student understanding.

(Two ways to teach every lesson!)

Teachers provide additional practice through **On My Own**, and students reflect on their learning.

### Create Consistency in Learning

Instructional routines are embedded within every Florida Reveal Math lesson to help students become proficient doers of mathematics.

#### **Build Fluency**

#### **Number Routines**

Support the development of flexibility with numbers and fluency with operations at the start of every lesson.



#### Math Language **Routines**

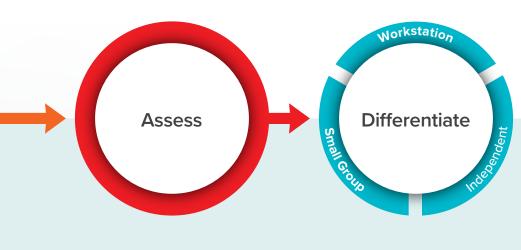
Promote mathematical language use and development as part of math instruction.



### Sense-Making

#### **Routines**

Build sense-making as a foundation for problem-solving and mathematical modeling.



Teachers will assign the Exit Ticket to inform instruction, and students communicate their confidence level with the teacher.

Teachers choose from a variety of **Daily Differentiation** activities to support every student's path to understanding, pulling small groups as needed to reinforce understanding.



# **Spark Curiosity Through Conversation**



"Let's bring curiosity, wonder, and joy back into the classroom and make math irresistible for kids."

-Raj Shah **Contributing Author** 



Name

#### **Broken Calculators**

Part A: Your calculator can only add 2s and 5s.

How can you make numbers less than 100 with this calculator?



#### Part B: Your calculator can only add 3s and 7s.

What whole numbers less than 12 cannot be made with this calculator?

How can you make each of the whole numbers 12 through 16 with this calculator?



What is the quickest way to make 30 with this calculator? Explain.

Is there a number greater than 11 that cannot be made with this calculator? Explain.

90 Ignite! • Broken Calculators

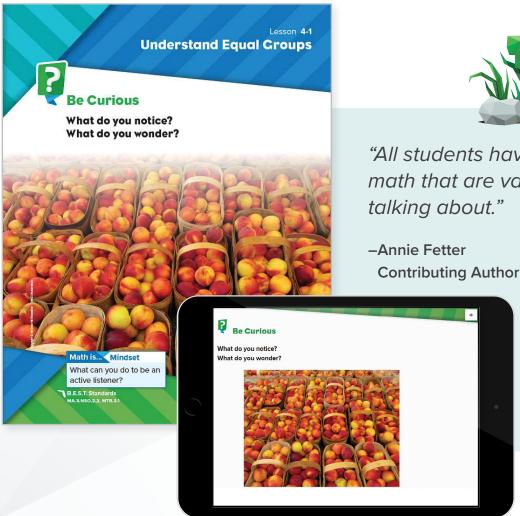


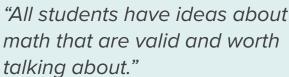
Each unit opens with an Ignite! activity, an interesting problem or puzzle that:

- Sparks students' interest and curiosity.
- Provides only enough information to open up students' thinking.
- Motivates them to persevere through challenges involved in problem-solving.

### Notice and Wonder

Sense-making routines launch every lesson, creating an equitable classroom culture where all ideas are welcome and respected. Student curiosity and ideas shared in **Be Curious** become the base for the day's lesson.





**Contributing Author** 



### Accessible to All Students

Be Curious offers a low floor, high ceiling routine that allows every student to explore and discuss their ideas with multiple entry points and approaches to problem-solving.

# **Build Understanding Through Exploration**

Teachers have their choice of two instructional strategies to facilitate student exploration within Explore & Develop:

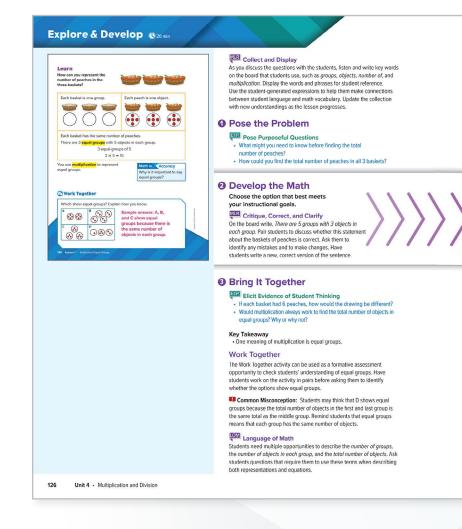
- Activity-Based Exploration allows students to explore concepts, develop and test hypotheses, and—most importantly engage in productive struggle as they use mathematical modeling to gain understanding.
- Guided Exploration follows a teacher-facilitated exploration with a question-and-answer format and collaboration to promote rich discourse.

#### Math is... Precision

### **Encourage Mathematical Thinking Habits**

To think like mathematicians. students must employ mathematical thinking and reasoning skills to develop a problem-solving frame of mind.

Florida Reveal Math helps students build proficiency through the **Math is... prompts**. These prompts are found in the Learn stage of every lesson and model the kinds of questions students can ask themselves to become proficient problem solvers and doers of math.



#### CHOOSE YOUR OPTION

### **Activity-Based Exploration**

Students explore and use equal groups to find the total number of objects.

Materials: counters or other countable manipulatives, yarn or string

Directions: Students will explore ways to find the total number of peaches in 5 baskets.

· Let's imagine there are five baskets and the baskets have peaches in them. How can you determine the total number of peaches in the baskets?

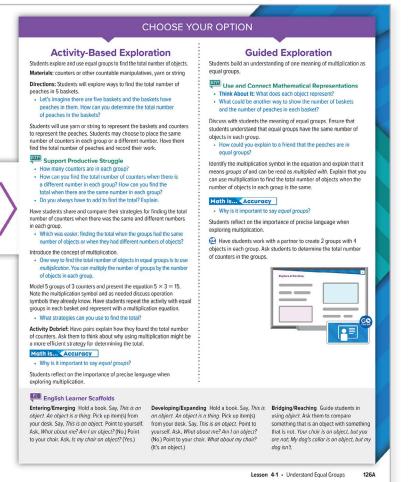
### **Guided Exploration**

Students build an understanding of one meaning of multiplication as



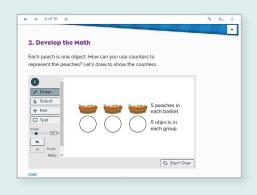
### Use and Connect Mathematical Representations

- Think About It: What does each object represent?
- · What could be another way to show the number of baskets and the number of peaches in each basket?



Explore & Develop also offers resources for teachers, like:

- Integrated Effective **Teaching Practices** guide instruction and discourse, keeping the student at the center of the learning.
- Lesson Presentations are available in both interactive and downloadable PowerPoint formats.



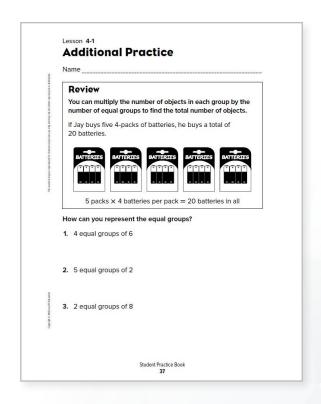
# Strengthen Understanding Through **Purposeful Practice**

Practice & Reflect provides students with questions that address all elements of rigor to practice application along with the algorithmic procedures.

On My Own activities can be completed in the print Student Edition or eBook and are also available in Spanish.

MATH GO On My Own How many? Fill in the blanks. equal groups of How can you represent the equal groups? 3. 2 equal groups of 7 4. 4 equal groups of 5 How many objects? 5. 4 equal groups of 4 pencils 6. 3 equal groups of 2 mittens  $4 \times 4 =$ pencils mittens What equation represents the equal groups? 9. STEM Connection Finn has 3 construction sites. He assigns 8 workers to each site. How many workers does he assign? Explain how you know

Two additional practice pages can be completed in the Student Practice Book or Interactive Digital Practice, which embeds learning aids.

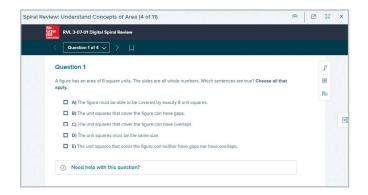




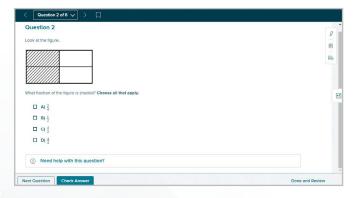
Every lesson contains a one- to two-minute video explanation of the lesson concept for students to reference as they complete independent work.



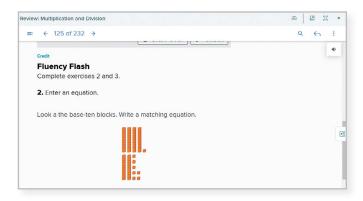
### Build Fluency and Number Sense



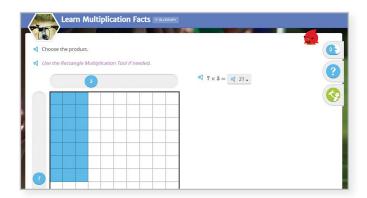
Spiral Review—Daily practice on the major concepts of each grade level in print and digital formats.



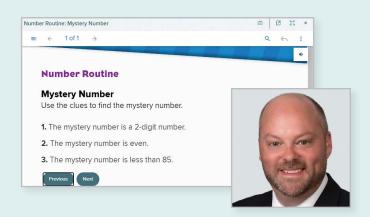
State Assessment Practice—Weekly benchmark focus to prepare for end-of-year assessments in print or digital formats.



Fluency Practice—Per unit practice addressing each grade's fluency expectations in print and digital formats.



**Redbird Mathematics**—Adaptive instruction on the focus areas across grade levels to accelerate learning.



### **Daily Number Routines**

Teachers utilize a **Number Routine**, written by John SanGiovanni, to build number sense and proficiency with numbers. This supports the students' ability to fluently and flexibly apply strategies to solve unknown problems.

# **Monitor Student Understanding**



Florida Reveal Math offers a comprehensive set of assessment tools that include diagnostic, formative, and summative tools.

### Diagnostic

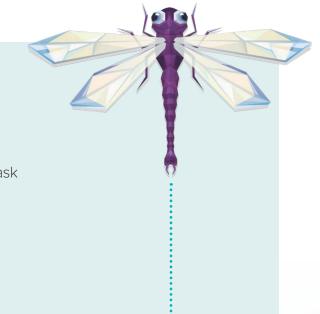
- Course Diagnostic
- Unit Diagnostic

#### **Formative**

- Exit Ticket
- Math Probe

#### **Summative**

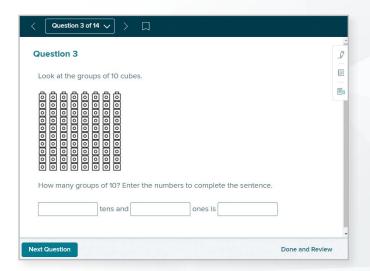
- Unit Assessment. Forms A and B
- Unit Performance Task
- Benchmark Assessments
- End-of-Year Assessments



### Print and Digital Formats

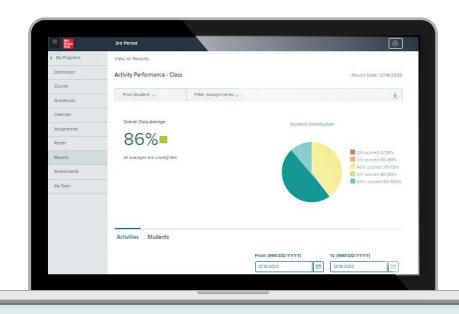
All assessments are available for either print or digital administration. Print Assessments can be found in the Assessment Resource Book or as downloadable PDFs in the Digital Center.

All digital assessment items, except for open response questions, are autoscored. Teachers can create new or customize existing assessments using additional item banks and item authoring tools.



### Data to Drive Instruction

Performance reports—found in the Digital Teacher Center—provide immediate feedback to teachers, which allows them to make data-driven instructional decisions.



### **Activity Performance Report**

Teachers can review useful data points for class activities, including item analysis by student and class.

### B.E.S.T. **Standards Report**

Teachers can access class performance by standard, including a cumulative score by class and student.

### MAP **Growth Report**

Teachers can view students' MAP Growth RIT scores and progress throughout the year.

# Integrate MAP Growth Data to Identify Gaps Early

MAP Growth™, the market's most trusted and accurate interim assessment, integrates its data with Florida Reveal Math on the Open Learning Platform.

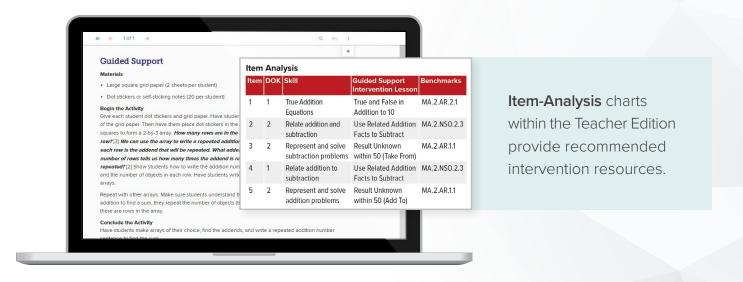
MAP Growth data can save teachers time by identifying students who may need additional support to access grade-level content. Auto-grouping and Recommended Targeted Skill Paths provide support and review of critical prerequisite skills.

### Ensure Student Readiness for Each Unit

The unit begins with a **Readiness Diagnostic** to assess Unit 3 each student's knowledge of essential prerequisite skills How Ready Am I? for the unit. Teachers can utilize the targeted intervention 1. Which number makes the equation true? resources to address the learning gaps and ensure 5 + 4 = 4 + ?**B.** 5 **A.** 3 students can access the grade level unit content. 2. Cara bought a package of toy cars for each of her 5 friends Each package has 4 cars. Which equation can be used to find the total number of cars Cara bought? **B.** 5+5+5+5+5=?**C.** 4+4+4+4=?**D.** 4+4+4+4+4=?3. Marco has 3 shelves in his room. There are 3 trophies on each many trophies does Marco have? **C**. 9 ried 15 bones. Maria found 6 bones. Maria traction equation 15 - 6 = ? to find out how n could Maria use to help solve her equation? **B.** 6 + 9 = 15**D.** 9 - 15 = 6bike for a total of 10 miles in two days. On the es his bike for 3 miles. Which equation number of miles he rode his bike the second **B.** 10 + 3 = ?**D.** ? - 10 = 3 Assessment Resource Book 37

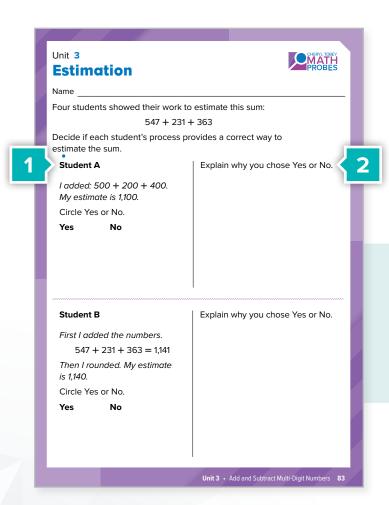
### Targeted Intervention

Intervention resources, including Guided Supports and Skills Support Sheets, align to the beginning- and end-of-unit assessment items and are available at the point-of-use to quickly correct misunderstanding and target gaps with small group lessons and practice sheets.



### Recognize Misconceptions in the Moment

Math Probes support teachers to identify and target common misconceptions within the unit.



#### **Short, Formative Assessment**

Each Math Probe features three to four items that are split into two parts:

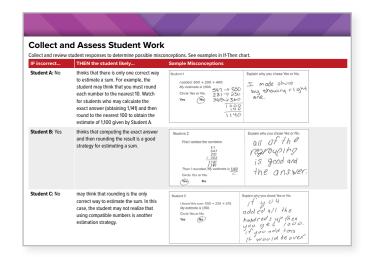
- 1. Part One assesses students' understanding of concepts.
- 2. Part Two asks students to share their thinking about the concepts.



Written by contributing author Cheryl Tobey

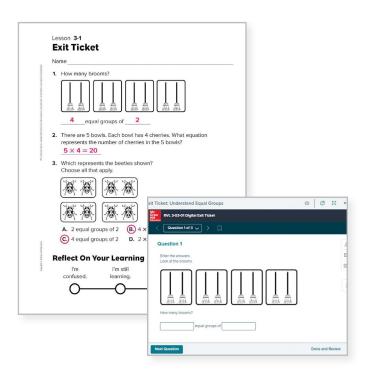
### Supports to Identify and Target

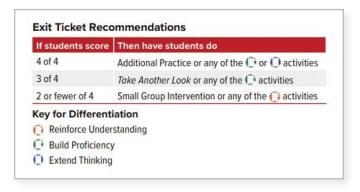
Authentic student sample responses help identify the misconception. Provided remedies help teachers correct misconceptions quickly and efficiently.



### Differentiate Based on Data

Exit Tickets are daily, quick formative assessments that take the guessing out of planning meaningful differentiation to raise all student learning. Teachers use students' scores on the Exit Ticket to decide on differentiated assignments from the robust differentiated resources available.





# Flexible Differentiation Options

Daily instruction includes workstations and online, independent activities to support daily differentiation:

### **Game Station**

Small-group games engage with hands-on lesson content and opportunities for collaboration.



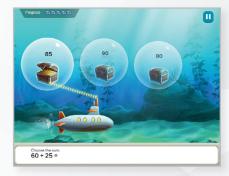
### **Application Station**

Activities to apply unit content to higher depths of knowledge.



### **Digital Station**

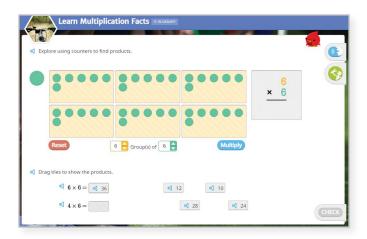
Interactive games to build proficiency throughout the unit.



### Accelerate Learning for Every Student

Redbird Mathematics provides students the added advantage of a personalized learning pathway continuously adapting to them. Redbird Mathematics supplements Florida Reveal Math instruction and accelerates learning for all students from remedial to advanced.

- Deliver just the right level and amount of instruction and practice to propel learning forward.
- Use STEM connections to show students why algebra readiness matters and connect math to the real world.
- Identify and close algebra readiness gaps without requiring additional whole-class instructional time.
- Generate real-time data to make insightful, actionable decisions about every student's progress towards algebra readiness.



### Accelerated Pathways for Grades 3 and 4

Courses for Florida Reveal Math Grade 3 Accelerated and Florida Reveal Math Grade 4 Accelerated are available to help meet the needs of your students. These courses combine the standards from grades 3, 4, and 5 into a two-year pathway per Florida's B.E.ST. Standards to prepare students for grade 6.





# **Instruction Informed by Experts**

McGraw Hill's Learning Scientists teamed up with expert authors to create a program guided by validated academic research and classroom best practices.

### Ralph Connelly, Ph.D.

Professor of Education at Brock University and current member of NCTM Mathematics Education Trust Board

#### **Annie Fetter**

Math Education Specialist at the 21st Century Partnership for STEM Education

#### Linda Gojak, M.Ed.

Past President of NCTM and NCSM

#### Sharon Griffin, Ph.D.

Professor Emerita of Education and Psychology at Clark University in Worcester, Massachusetts

### Susie Katt, Ph.D.

K-2 Mathematics Coordinator at Lincoln Public Schools in Lincoln, Nebraska

### Ruth Harbin Miles, Ed.S.

Math Coach and past NCTM (2013-2016) and NCSM (2005-2008) Board of Directors member

### Nicki Newton, Ed.D.

Educational consultant and the Founder and Developer of Math Online PD Academy

### Georgina Rivera, M.Ed.

Current 2nd Vice-President of NCSM

#### John SanGiovanni, M.Ed.

Coordinator of Elementary Mathematics in Howard County, Maryland and past NCTM Board of Directors member

### Raj Shah, Ph.D.

Founder of Math Plus Academy and a founding member of the Global Math Project

#### Jeff Shih, Ph.D.

Instructor and professor at the University of Nevada and Current Member of NCTM Board of Directors

### Cheryl Tobey, M.Ed.

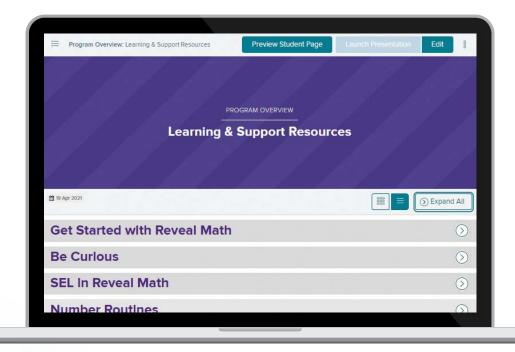
Mathematics Program Director of the Mathematics and Science Alliance

### Dinah Zike, M.Ed.

Founder of Dinah Zike Academy: Inventor of Foldables®

### Continued Learning Led by Experts

Teachers and administrators have access to a comprehensive set of online professional learning resources to support successful implementation and continued learning throughout the year.



#### **Quick Start**

Concise resources designed to quickly get teachers up to speed with Florida Reveal Math.

### Digital Walkthrough

Short videos guide teachers and students through the digital platform.

### **Workshop Modules**

Video-based learning modules present instructional topics that are key to Florida Reveal Math.

### **Expert Insights Videos**

At the start of each unit, authors and experts share an overview of the concepts along with teaching tips and insights about how to implement the lesson.

### **Instructional Videos**

Authors showcase key features and provide implementation recommendations.

- Annie Fetter: Be Curious and Sense-Making Routines
- Raj Shah: Ignite! Activities
- Cheryl Tobey: Math Probes
- Linda Gojak: Guided and Activity-Based Exploration
- John SanGiovanni: **Number Routines** and Fluency

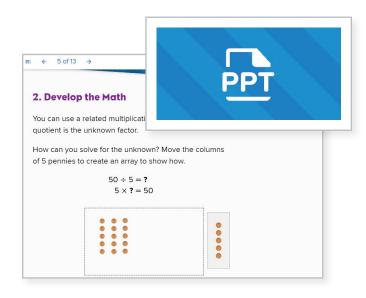
# **Easily Plan Lessons** and Teach with Confidence

### See all lesson resources at once

Teachers can view all the lesson resources and plan from organized lesson landing pages within the **Digital Teacher Center** that align to their print Teacher Edition layout. Lessons can be added to the calendar and easily accessed from the Teacher Dashboard on the day of learning.



### Customize lesson presentations

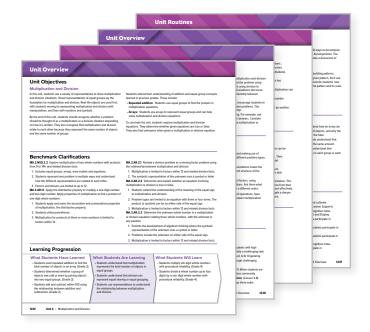


Teachers can launch interactive and engaging presentations with embedded eTools from their lesson landing page. Downloadable PowerPoint presentations allow teachers to customize or teach offline.

# Engage students with productive learning opportunities

The Unit Overview offers a comprehensive overview of the unit content for just-in-time professional support and includes:

- Content Overview.
- Pedagogical Overview.
- Language Overview.
- Unit Routines.



# Access content through multiple learning management systems

McGraw Hill's Open Learning platform currently integrates with the following Federated Standards: SAML 2.0 IDP, LTI 1.0, and Clever. Integration is possible with most learning management systems that support these standards, including but not limited to:

- Canvas.
- Schoology.
- Google Classroom.
- Blackboard.



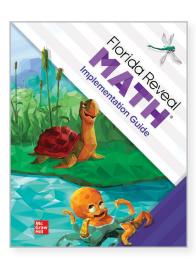
# **Teacher Resources**

### **Print Resources**

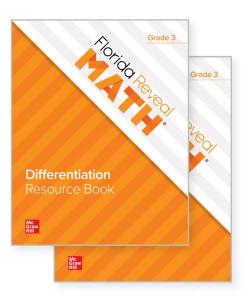
Teacher Edition, 2-volume



Implementation Guide



Differentiation Resource Book and Assessment Resource Book



### Classroom Workstation Kit

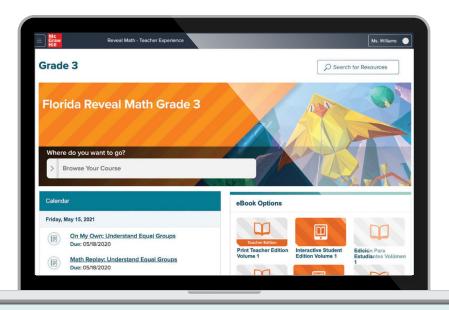
Workstation Teacher Guide

Game Station Resource Book



Application Station Cards







### Log-in to Review the Digital Teacher Center:

my.mheducation.com Username: flrevealk5 | Password: flrevealk5

### Digital Teacher Center

Teachers have access to an intuitive and easy-to-use platform where they can plan and implement engaging instruction. The teacher experience includes:

- Daily, interactive lesson presentations.
- Customizable PowerPoint lesson presentations.
- Engaging, rich differentiation resources.
- Auto-scored practice and assessment.
- Customizable assessment and item banks.

- Teacher and Administrator data and reporting.
- Professional Development workshops and videos.
- Ability to add resources, including presentations, website links, and more.
- Classroom management and grouping tools.

### Manipulative Kits

The Classroom Manipulatives Kits include hands-on materials to support lesson instruction and are organized in plastic tubs for easy storage.

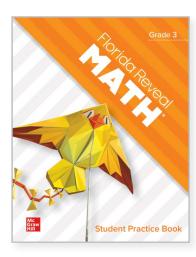
## **Student Resources**

### **Print Resources**

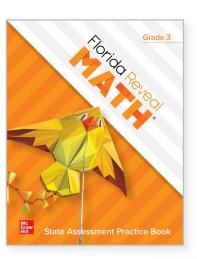
Student Edition, 2-volume



Student Practice Book



State Assessment Practice Book



# Spanish Resources

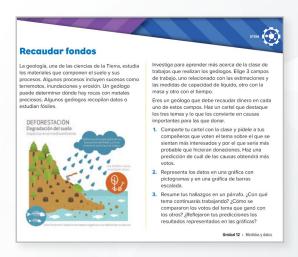
Student Edition Volume 1



Student Edition Volume 2



**Application Station Cards** 







### Log-in to Review the Digital Student Center:

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### Digital Student Center

Designed with the needs of elementary students in mind, the Digital Student Center offers access to a robust set of engaging digital tools and interactive learning aids, including:

- Interactive Student Editions.
- Daily, interactive practice with embedded learning aids.
- Online assessments with interactive question types.
- Adaptive instruction and practice through Redbird Mathematics.
- Animations, glossary, videos, and eTools.

- Digital games designed for purposeful practice.
- Instructional mini-lessons to reinforce understanding.
- Rich exploratory STEM Adventures.
- Visual and dynamic Web Sketchpad® activities.

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