Vmath
Third Edition

VMATH ACCELERATES STUDENTS TO GRADE-LEVEL MATH ACHIEVEMENT

Foundational and Prerequisite Skills ▪ Conceptual Development ▪ Problem Solving ▪ Representational, Abstract, and Concrete Models ▪ Inquiry-Based Lesson Components ▪ Student Collaboration ▪ Writing Exercises ▪ Connections to Real-World Math

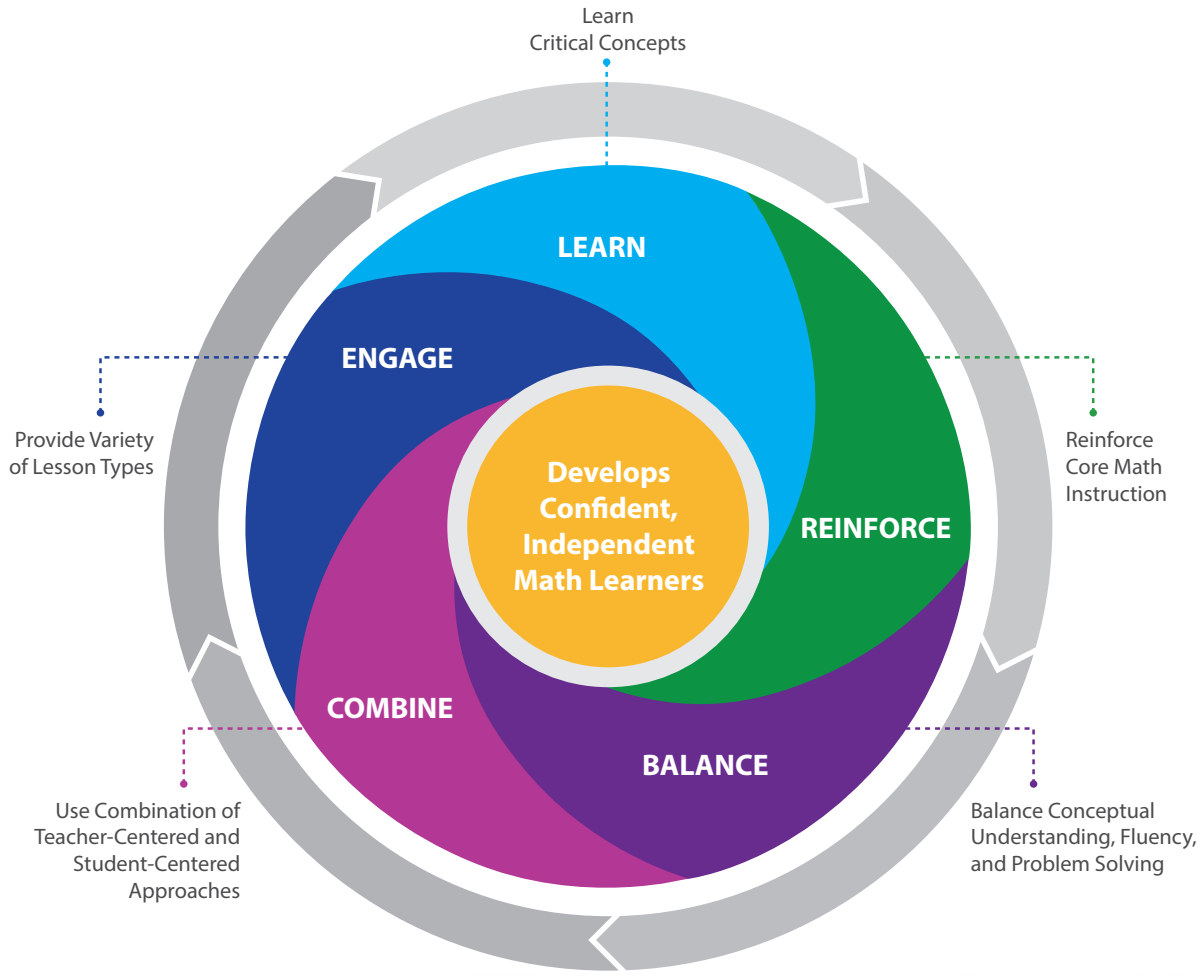
VOYAGER SOPRIS LEARNING™

Vmath Third Edition

- Delivers **focused, standards-based instruction**, while also providing foundational skills necessary for grade-level success
- Wraps around any **core math program**
- Provides **conceptual development, procedural skill and fluency practice,** and **application activities**
- Delivers **explicit support** in the skills expected by new, more rigorous standards
- Focuses on **grade-level content** and **reinforces skills** taught in the core curriculum
- Provides an **easy implementation model**
- Provides **foundational lessons** to scaffold the instruction
- Provides instruction to support the **progression of skills** outlined in state and national standards
- Includes **comprehensive, built-in assessment**

FOCUSED, STANDARDS-BASED INSTRUCTION THAT INCREASES MATH ACHIEVEMENT

Vmath® is a targeted math intervention program for struggling students in grades 2–8 that provides additional opportunities to master critical math concepts and skills. *Vmath* is specifically designed to reinforce grade-level expectations. Through a balanced, systematic approach, *Vmath* creates successful learning experiences for students and develops confident, independent learners of mathematics. With a blended print and technology solution, or a digital-only option, *Vmath* delivers essential content using strategies proven to accelerate and motivate at-risk students.



"Since the implementation of *Vmath*, we have seen an increase in student performance on various assessments administered school-wide and ultimately produced significant increases on state and national assessments. We will continue to use *Vmath* because it is making a difference in the lives of our students."

—Tammy Brown, Reading and Math Coach
Aliceville Middle School, Aliceville, AL

8 REASONS *VMATH* WORKS

1 CONSISTENT LESSON FORMAT

The four-step *Vmath* lesson format aligns with the major components of explicit instruction:

STEP 1 GET STARTED — Teacher Modeling

STEP 2 TRY IT TOGETHER — Student and Teacher Interaction

STEP 3 WORK ON YOUR OWN — Independent Work

STEP 4 CHECK UP — Error Analysis

2 CONCEPTUAL UNDERSTANDING

Vmath integrates instruction in math concepts consistently in every module:

5 VOCABULARY

Vmath lessons reinforce the academic vocabulary critical for student understanding. Teachers introduce the words at the start of each lesson, reinforce throughout the lesson, and provide multiple exposures to new vocabulary.

Academic Vocabulary

Before the lesson, introduce and discuss the Academic Vocabulary. Refer to the Academic Vocabulary as needed during the lesson.

- **Commutative Property of Addition** states that the order of the addends can be changed without affecting the sum
- **Associative Property of Addition** states that the grouping of the addends can be changed without affecting the sum

6 ADVENTURES

Vmath includes exciting photographs and real-life math situations that pose relevant, project-like questions in which students read, use data, answer open-ended questions, or write short paragraphs. All Adventures are included in a separate eBook.

Vmath is a great instructional program that provides students with basic learning tools in a building, sequential order to be successful in math. I truly believe in the program. In fact, I have all my students doing it, not just as an intervention program.

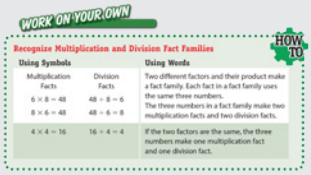
—Sergio Baca, Bilingual Teacher, El Paso ISD, TX

3 APPLICATION OF SKILLS

Several components of *Vmath* are geared toward helping students apply their learning. Each daily lesson provides opportunities for students to communicate their thinking.

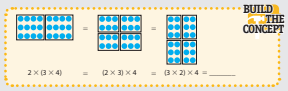
- Math Writing
- Algebraic Thinking
- Explaining Answers
- Talking about Math

4 PROCEDURAL UNDERSTANDING



The "How To" box provides students with detailed steps so they can repeat procedures they learn.

"Build the Concept" boxes use visual models to help students develop a deeper understanding of targeted math concepts.

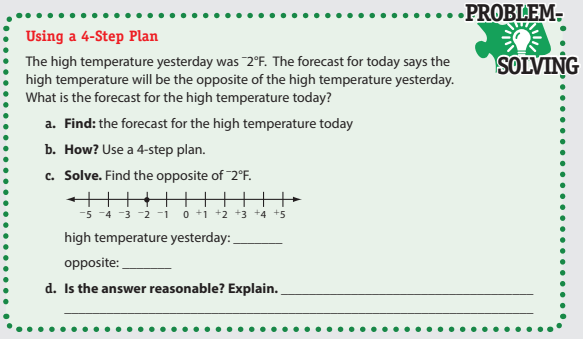


Extra Practice Pages reinforce automaticity.

VmathLive hones computational fluency.

7 PROBLEM-SOLVING

Problem solving is introduced strategically throughout each *Vmath* module to help students: **(1) formulate a plan, (2) implement the plan, and (3) explain their thinking**.



8 DIFFERENTIATION

Vmath offers multiple opportunities to assess, reinforce, and differentiate instruction.

English Language Learners

Use the VmathLive Animated Math Dictionary to review the terms *less than symbol* and *greater than symbol*. Demonstrate the vocabulary at the beginning of the lesson as students gather around the computer screen or through a projection system if possible.

To distinguish between the less than symbol, <, and the greater than symbol, >, show students that the less than symbol looks like a tilted 4 and the greater than symbol looks like a tilted 7 and that 4 is less than 7.

When working comparison problems, have students say the math sentences aloud, reinforcing the names for the symbols.

Students with Special Needs

Have students draw a number line for reference that shows ⁻10 to 10, labeling the left arrow with the words *Lesser, Less than,* and *Least,* all of which begin with the letter *L*. This will be a visual cue for students to remember that numbers farther to the left on a number line are less than numbers toward the right.

Vmath Third Edition

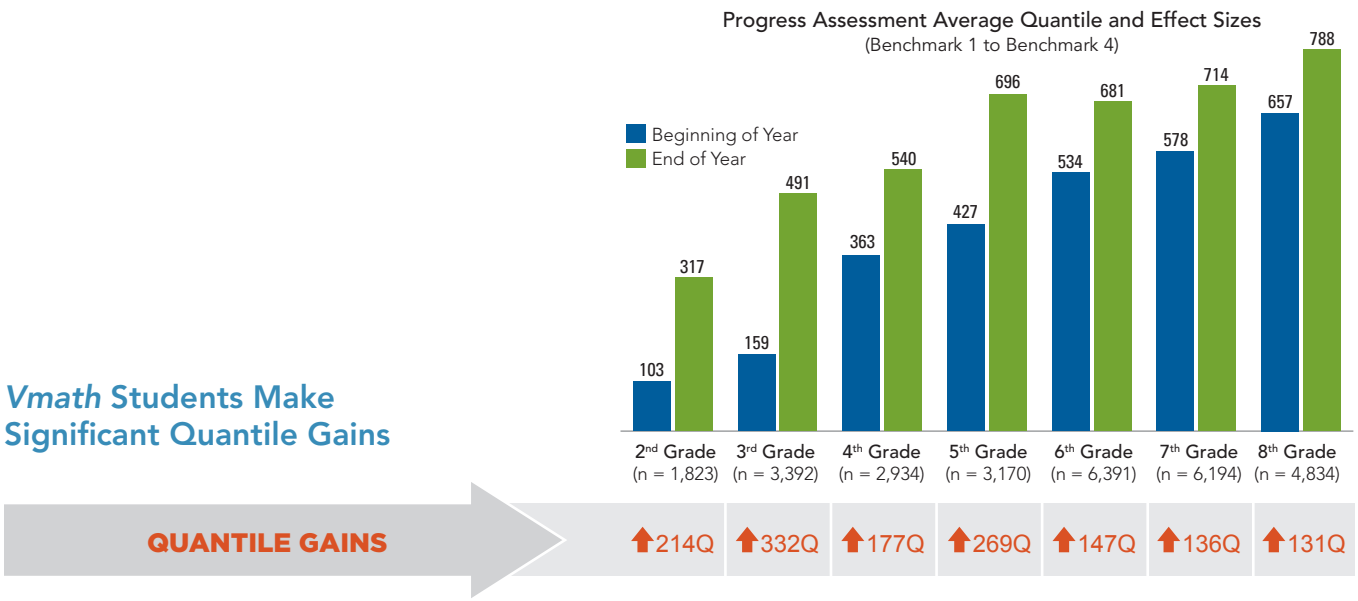
GROUNDED IN RESEARCH

Vmath Third Edition stems from a strong research foundation as well as the strong instructional approach of previous editions of *Vmath*, which have been validated in schools across the country. The three snapshots here show evidence of effectiveness for *Vmath* Second Edition.

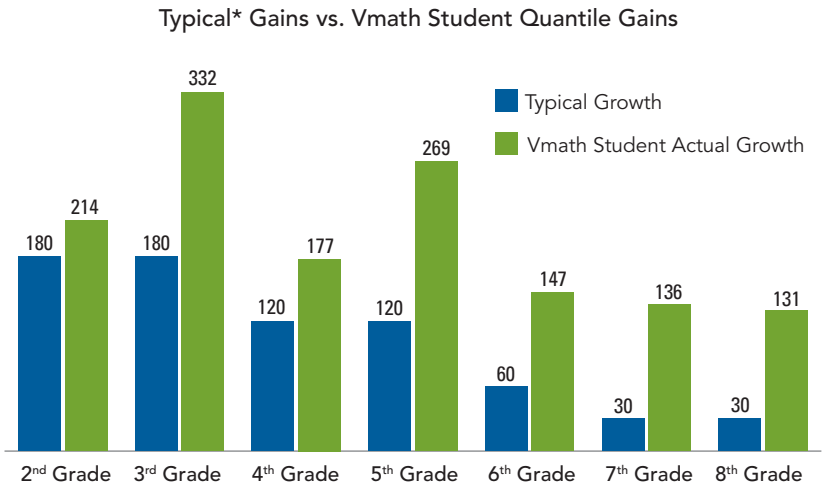
42 States and 262 Districts: Grades 2–8; 3-Year Cohort—2009–2012

In a nationwide study, students enrolled in *Vmath* increased their overall proficiency as measured by the Progress Assessments. Administered four times a year in the Second Edition, the Progress Assessments indicate students' optimal learning range and monitor progress toward grade-level goals. The Progress Assessments yield a Quantile score based on the Quantile Framework® for Mathematics.

Vmath Students Make Significant Quantile Gains



Vmath Students Exceed Typical* Quantile Growth to Close the Achievement Gap with Grade-Level Peers



**These are typical results for an average student at the 50th percentile over 30 weeks based on research from MetaMetrics®.*

Oklahoma Statewide: Impact of *Vmath* on Student Math Performance

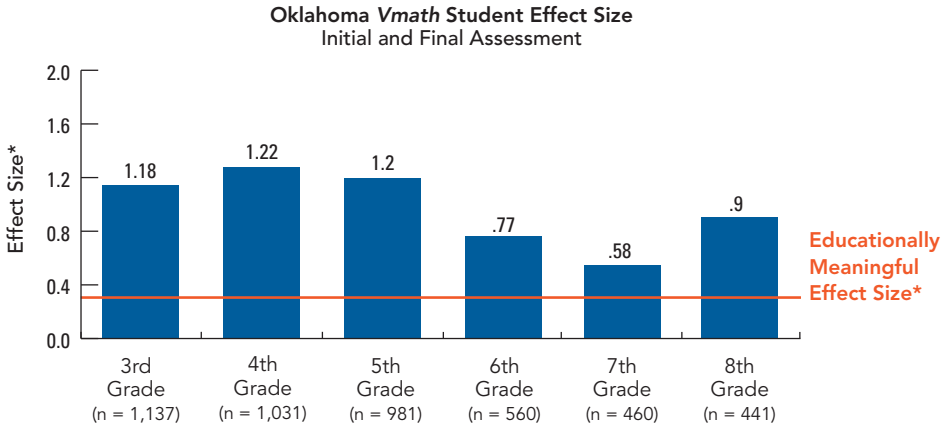
During the 2008–2009 school year, Oklahoma students in grades 3–8 demonstrated meaningful math gains after 26 weeks. Students rapidly accelerated their math skills and improved their overall math achievement.

Key Details

Grade Levels: 3–8

Instructional Period: 2008–2009

Measures: Initial and Final Assessment



El Paso ISD, TX: Performance Gain on TAKS Math Section

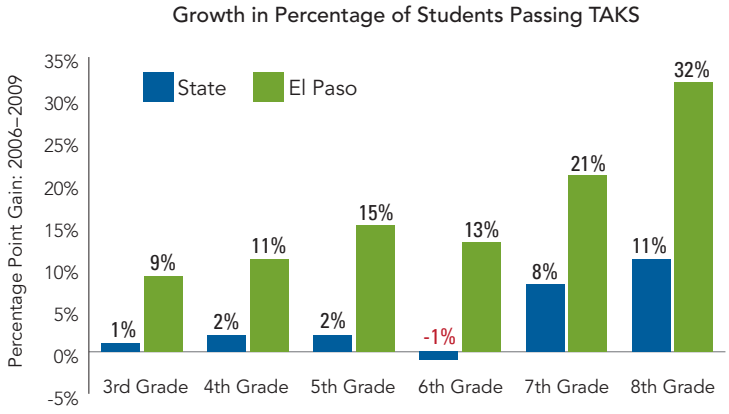
El Paso ISD began implementing *Vmath* in the 2005–2006 school year to boost student achievement in math. After four years with the program, each grade made substantial gains and has outperformed the state as measured by the percentage of students passing the state assessment between 2006 and 2009.

Key Details

Grade Levels: 3–8

Instructional Period: 2005–2009

Measure: Texas Assessment of Knowledge and Skills (TAKS)



For more results, visit the "Proven Success" page at www.voyagersopris.com/vmath

**Effect sizes were calculated using the Initial and Final Assessment scores. Effect sizes (for differences expressed as means) of 0.2 are considered small, 0.5 are medium, and 0.8 are large (Cohen, 1988). An effect size of 0.3 is considered to be educationally meaningful.*

STREAMLINED APPROACH PROVIDES PROGRESSION TO GRADE-LEVEL MATH PERFORMANCE

- **7 levels**
- **7 modules per level**; first module in every level is a Foundational Module that reviews instruction from previous grade levels
- **10–15 lessons per module** plus 2 preskills lessons
- **Built-in time** for differentiation and assessment
- Every module includes **preskills, extra practice, and reteach activities**

LEVEL C
1. Foundations
2. Addition
3. Subtraction
4. Measurement
5. Money and Geometry
6. Time, Graphing, and Data
7. Fractions and Concepts of Multiplying and Dividing

LEVEL D
1. Foundations
2. Whole Numbers
3. Whole Number Addition and Subtraction
4. Whole Number Multiplication
5. Whole Number Division
6. Fractions and Money
7. Data, Measurement, and Geometry

LEVEL E
1. Foundations
2. Addition and Subtraction
3. Multiplication and Division
4. Understanding Fractions and Equivalence
5. Operations on Fractions and Relationship to Decimals
6. Geometry
7. Measurement and Data

LEVEL F
1. Foundations
2. Whole Numbers and Decimals
3. Operations with Whole Numbers and Decimals
4. Fractions
5. Algebraic Reasoning
6. Data Analysis
7. Geometry and Measurement

LEVEL G
1. Foundations
2. Rational Numbers Part A
3. Rational Numbers Part B
4. Expressions, Equations, and Inequalities
5. Proportional Thinking
6. Geometry
7. Data

LEVEL H
1. Foundations
2. Rational Numbers Part A
3. Rational Numbers Part B
4. Expressions, Equations, and Inequalities
5. Proportionality
6. Geometry
7. Data, Probability, and Statistics

LEVEL I
1. Foundations
2. Real Numbers
3. Equations
4. Functions Part A
5. Functions Part B
6. Transforming Geometry
7. Geometry

Visit www.voyagersopris.com/vmath for complimentary samples

"*Vmath* breaks it down for kids who are having difficulty with math. I have seen the growth. It is a great program that definitely motivates the kids. I really appreciate *Vmath* and what it has brought to my class and the fact that it has helped so many of my kids do much better in math."

—Giovanni Amorante, *Vmath* Teacher
Country Club Middle School, Miami, FL

4 TYPES OF LESSONS

Engage Students, Scaffold Content, and Focus on Math Concepts

VMATH LESSONS (see page 10)

- Four-step lessons: Get Started, Try It Together, Work on Your Own, Check Up
- Explicit instruction that reinforces skills, concepts, or problem solving
- 40–45 minutes (with implementation options for 20–30 minutes)

MATH FLASH LESSONS (see page 12)

- Reinforce concepts and skills most frequently tested
- 20-minute lessons

HANDS-ON LESSONS (see page 13)

- Four-step lessons: Get Ready, Discover, Discover Box, Explore More
- Develop deeper conceptual understanding through the use of common manipulatives
- 40–45 minutes; included in Levels D–I

GIZMOS LESSONS (see page 14)

- Four-step lessons: Get Ready, Discover, Discover Box, Explore More
- Reinforce conceptual understanding with online digital manipulatives and interactive simulations
- Infuse fun, easy-to-navigate activities for diverse learners

VMATH LESSONS PROVIDE A CONSISTENT CLASSROOM ROUTINE

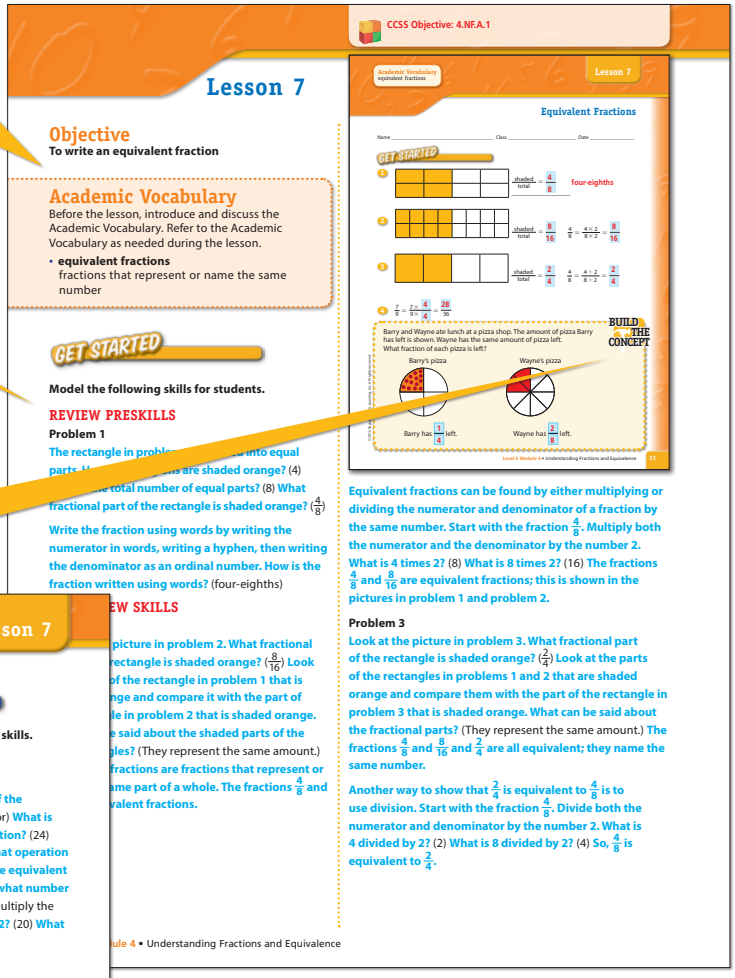
Focus on Academic Vocabulary

Review and Model
Teachers review prerequisite skills and model new skills

Emphasis on Conceptual Development

Carefully Crafted Teacher Dialogue

Consistent Application of Skills
Students apply learning to answer skill-building and problem-solving questions



CCSS Objective: 4.NF.A.1

Lesson 7

Objective
To write an equivalent fraction

Academic Vocabulary
Before the lesson, introduce and discuss the Academic Vocabulary. Refer to the Academic Vocabulary as needed during the lesson.
- **equivalent fractions**
  fractions that represent or name the same number

GET STARTED

Model the following skills for students.

REVIEW PRESKILLS

Problem 1

The rectangle in problem 1 is divided into equal parts. How many parts are shaded orange? (4) What is the total number of equal parts? (8) What fractional part of the rectangle is shaded orange? ($\frac{4}{8}$)

Write the fraction using words by writing the numerator in words, writing a hyphen, then writing the denominator as an ordinal number. How is the fraction written using words? (four-eighths)

REVIEW SKILLS

Look at the picture in problem 2. What fractional part of the rectangle is shaded orange? ($\frac{8}{16}$) Look at the parts of the rectangle in problem 1 that is shaded orange and compare it with the part of the rectangle in problem 2 that is shaded orange. What can be said about the shaded parts of the rectangles? (They represent the same amount.) Equivalent fractions are fractions that represent or name the same part of a whole. The fractions $\frac{4}{8}$ and $\frac{8}{16}$ are equivalent fractions.

Equivalent Fractions

GET STARTED

four-eighths

BUILD THE CONCEPT

Barry and Wayne ate lunch at a pizza shop. The amount of pizza Barry has left is shown. Wayne has the same amount of pizza left. What fraction of each pizza is left?

Barry's pizza — Barry has $\frac{1}{4}$ left.

Wayne's pizza — Wayne has $\frac{2}{8}$ left.

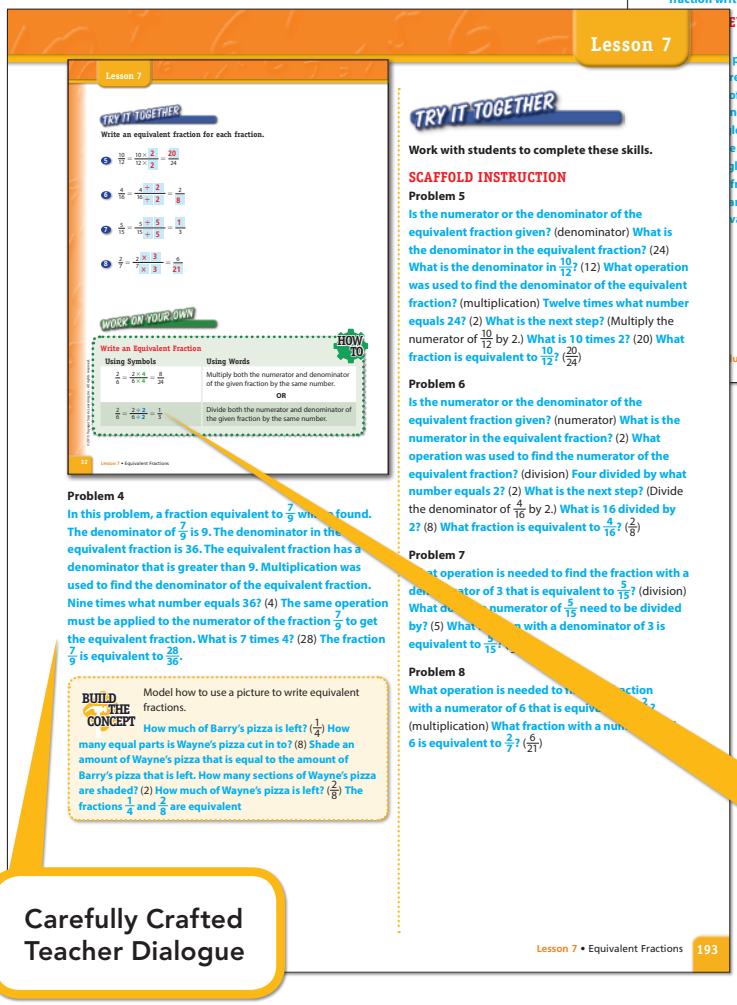
Equivalent fractions can be found by either multiplying or dividing the numerator and denominator of a fraction by the same number. Start with the fraction $\frac{4}{8}$. Multiply both the numerator and the denominator by the number 2. What is 4 times 2? (8) What is 8 times 2? (16) The fractions $\frac{4}{8}$ and $\frac{8}{16}$ are equivalent fractions; this is shown in the pictures in problem 1 and problem 2.

Problem 3

Look at the picture in problem 3. What fractional part of the rectangle is shaded orange? ($\frac{2}{4}$) Look at the parts of the rectangles in problems 1 and 2 that are shaded orange and compare them with the part of the rectangle in problem 3 that is shaded orange. What can be said about the fractional parts? (They represent the same amount.) The fractions $\frac{4}{8}$ and $\frac{8}{16}$ and $\frac{2}{4}$ are all equivalent; they name the same number.

Another way to show that $\frac{2}{4}$ is equivalent to $\frac{4}{8}$ is to use division. Start with the fraction $\frac{4}{8}$. Divide both the numerator and denominator by the number 2. What is 4 divided by 2? (2) What is 8 divided by 2? (4) So, $\frac{4}{8}$ is equivalent to $\frac{2}{4}$.

Module 4 • Understanding Fractions and Equivalence



Lesson 7

TRY IT TOGETHER

Write an equivalent fraction for each fraction.

5. $\frac{10}{12} = \frac{10 \times 2}{12 \times 2} = \frac{20}{24}$
6. $\frac{4}{16} = \frac{4 \div 2}{16 \div 2} = \frac{2}{8}$
7. $\frac{5}{15} = \frac{5 \div 5}{15 \div 5} = \frac{1}{3}$
8. $\frac{2}{7} = \frac{2 \times 3}{7 \times 3} = \frac{6}{21}$

WORK ON YOUR OWN

Write an Equivalent Fraction

HOW TO

Using Symbols	Using Words
$\frac{2}{6} = \frac{2 \times 4}{6 \times 4} = \frac{8}{24}$	Multiply both the numerator and denominator of the given fraction by the same number.
OR	
$\frac{2}{6} = \frac{2 \div 2}{6 \div 2} = \frac{1}{3}$	Divide both the numerator and denominator of the given fraction by the same number.

Lesson 7 • Equivalent Fractions

Problem 4

In this problem, a fraction equivalent to $\frac{7}{9}$ will be found. The denominator of $\frac{7}{9}$ is 9. The denominator in the equivalent fraction is 36. The equivalent fraction has a denominator that is greater than 9. Multiplication was used to find the denominator of the equivalent fraction. Nine times what number equals 36? (4) The same operation must be applied to the numerator of the fraction $\frac{7}{9}$ to get the equivalent fraction. What is 7 times 4? (28) The fraction $\frac{7}{9}$ is equivalent to $\frac{28}{36}$.

BUILD THE CONCEPT

Model how to use a picture to write equivalent fractions.

How much of Barry's pizza is left? ($\frac{1}{4}$) How many equal parts is Wayne's pizza cut in to? (8) Shade an amount of Wayne's pizza that is equal to the amount of Barry's pizza that is left. How many sections of Wayne's pizza are shaded? (2) How much of Wayne's pizza is left? ($\frac{2}{8}$) The fractions $\frac{1}{4}$ and $\frac{2}{8}$ are equivalent

TRY IT TOGETHER

Work with students to complete these skills.

SCAFFOLD INSTRUCTION

Problem 5

Is the numerator or the denominator of the equivalent fraction given? (denominator) What is the denominator in the equivalent fraction? (24) What is the denominator in $\frac{10}{12}$? (12) What operation was used to find the denominator of the equivalent fraction? (multiplication) Twelve times what number equals 24? (2) What is the next step? (Multiply the numerator of $\frac{10}{12}$ by 2.) What is 10 times 2? (20) What fraction is equivalent to $\frac{10}{12}$? ($\frac{20}{24}$)

Problem 6

Is the numerator or the denominator of the equivalent fraction given? (numerator) What is the numerator in the equivalent fraction? (2) What operation was used to find the numerator of the equivalent fraction? (division) Four divided by what number equals 2? (2) What is the next step? (Divide the denominator of $\frac{4}{16}$ by 2.) What is 16 divided by 2? (8) What fraction is equivalent to $\frac{4}{16}$? ($\frac{2}{8}$)

Problem 7

What operation is needed to find the fraction with a denominator of 3 that is equivalent to $\frac{5}{15}$? (division) What does the numerator of $\frac{5}{15}$ need to be divided by? (5) What fraction with a denominator of 3 is equivalent to $\frac{5}{15}$?

Problem 8

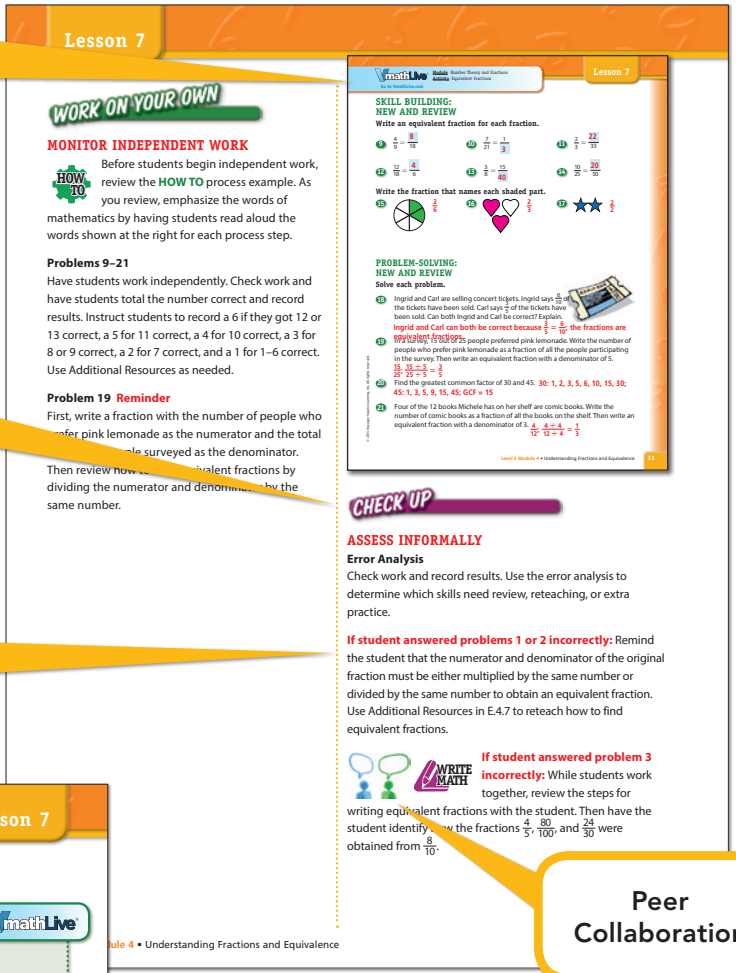
What operation is needed to find the fraction with a numerator of 6 that is equivalent to $\frac{2}{7}$? (multiplication) What fraction with a numerator of 6 is equivalent to $\frac{2}{7}$? ($\frac{6}{21}$)

Lesson 7 • Equivalent Fractions 193

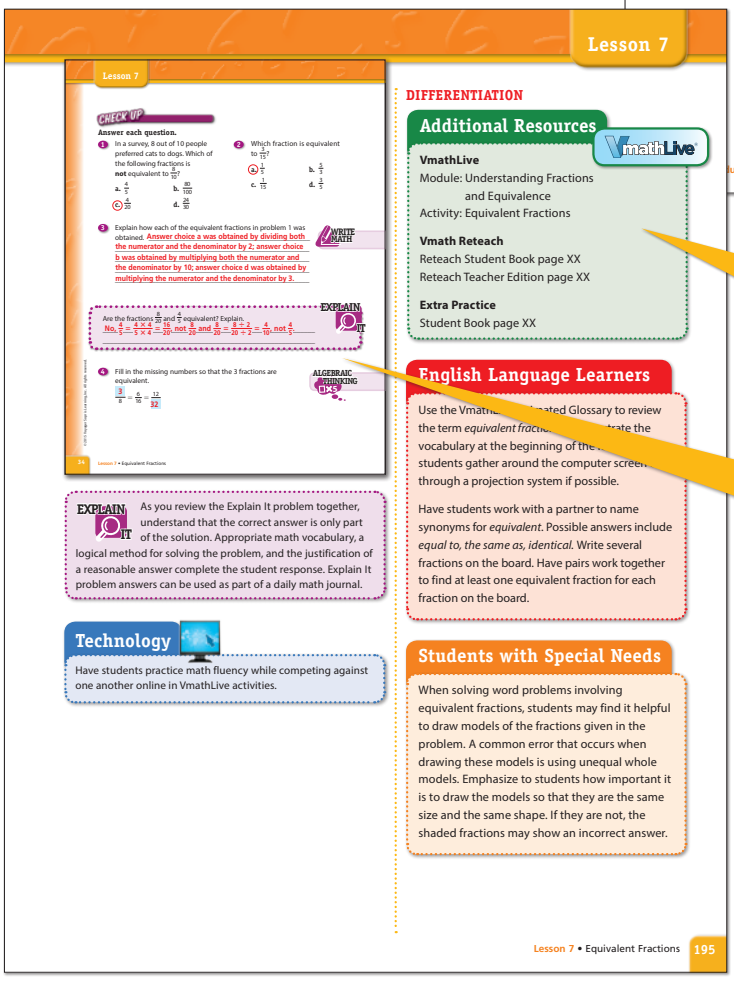
Online Math Practice Builds Fluency
VmathLive engages students with online learning and math games

Daily Informal Assessments
Allow teachers to check for understanding and intervene with targeted corrective feedback

Error Analysis—If/Then Support
Helps teachers provide corrective feedback, review, and reteach



Peer Collaboration



Built-in Differentiation

Explain It
Builds students' ability to reason and communicate their mathematical thinking

Vmath Third Edition

MATH FLASH LESSONS REINFORCE CONCEPTS AND SKILLS MOST FREQUENTLY TESTED

MATH flash

CCSS Objectives: 4.MD.C.5a; 4.MD.C.5b; 4.MD.C.6; 4.MD.C.7

Lesson 1

Objective

To use a protractor to measure angles and to find missing measures of angles

Model the following skills for students.

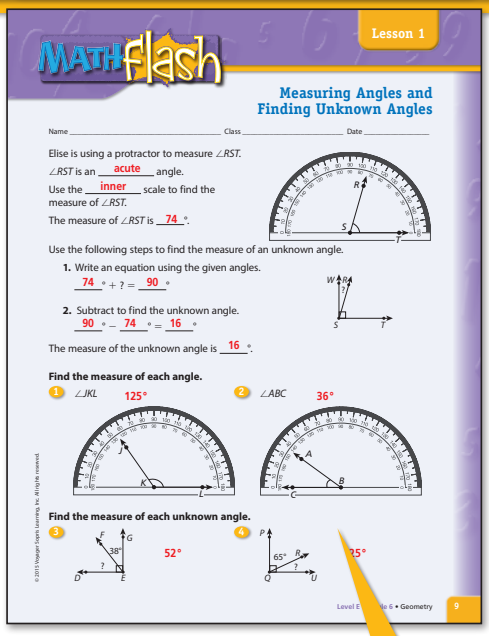
Look at the angle Elise is measuring. Angle *RST* is shown on a protractor. What type of angle is ∠*RST*? (acute angle) **Is the measure of an acute angle greater than or less than the measure of a right angle?** (less than)

The protractor has two scales, an inner scale and an outer scale. Both scales go from 0° to 180° in opposite directions. Look at the ray *SR*. Between what two numbers is it pointing on the inner scale? (70 and 80) **Between what two numbers is it pointing on the outer scale?** (100 and 110) **Because ∠*RST* is an acute angle, use the inner scale. Count the tick marks from 70. How many tick marks is it to where ray *SR* is pointing?** (4) **What is the measure of ∠*RST*?** (74°)

Work with students to complete the following skills.

You can find the measure of an unknown angle using given angles. Look at the diagram. You know the measure of ∠*RST* and the measure of a right angle. What is the measure of ∠*RST*? (74°) **What is the measure of a right angle?** (90°)

To find the measure of the unknown angle, first write an equation. Which two angles equal the measure of a right angle? (∠*RST* and the unknown angle) **So, to find the measure of the unknown angle, use the equation 74° + ? = 90°. Solve by using the opposite operation, subtraction. What is the measure of the unknown angle?** (16°)



MATH flash — Lesson 1

Measuring Angles and Finding Unknown Angles

Name _____ Class _____ Date _____

Elise is using a protractor to measure ∠*RST*.
∠*RST* is an acute angle.
Use the inner scale to find the measure of ∠*RST*.
The measure of ∠*RST* is 74°.

Use the following steps to find the measure of an unknown angle.

1. Write an equation using the given angles.
   74° + ? = 90°
2. Subtract to find the unknown angle.
   90° − 74° = 16°

The measure of the unknown angle is 16°.

Find the measure of each angle.

1. ∠*JKL* 125°
2. ∠*ABC* 36°

Find the measure of each unknown angle.

3. 52°
4. 75°

Level E • Grade 6 • Geometry 9

Rigorous Content
Content reflects new standards

Multiple Question Types
Questions reinforce the concepts and skills needed for success

Explicit Instruction

HANDS-ON LESSONS DEVELOP DEEPER CONCEPTUAL UNDERSTANDING THROUGH USE OF COMMON MANIPULATIVES

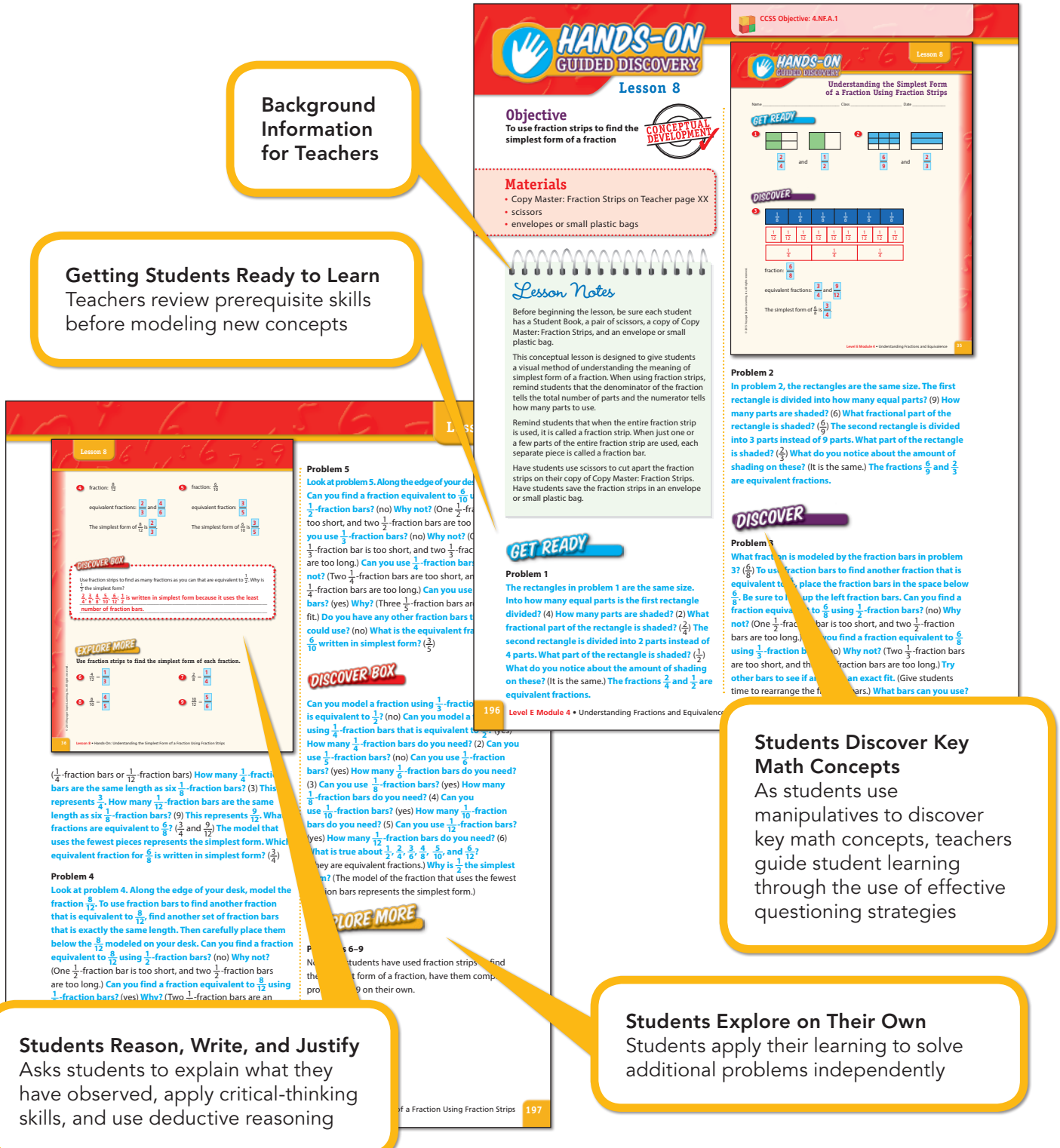
Background Information for Teachers

Getting Students Ready to Learn
Teachers review prerequisite skills before modeling new concepts

Students Reason, Write, and Justify
Asks students to explain what they have observed, apply critical-thinking skills, and use deductive reasoning

Students Discover Key Math Concepts
As students use manipulatives to discover key math concepts, teachers guide student learning through the use of effective questioning strategies

Students Explore on Their Own
Students apply their learning to solve additional problems independently



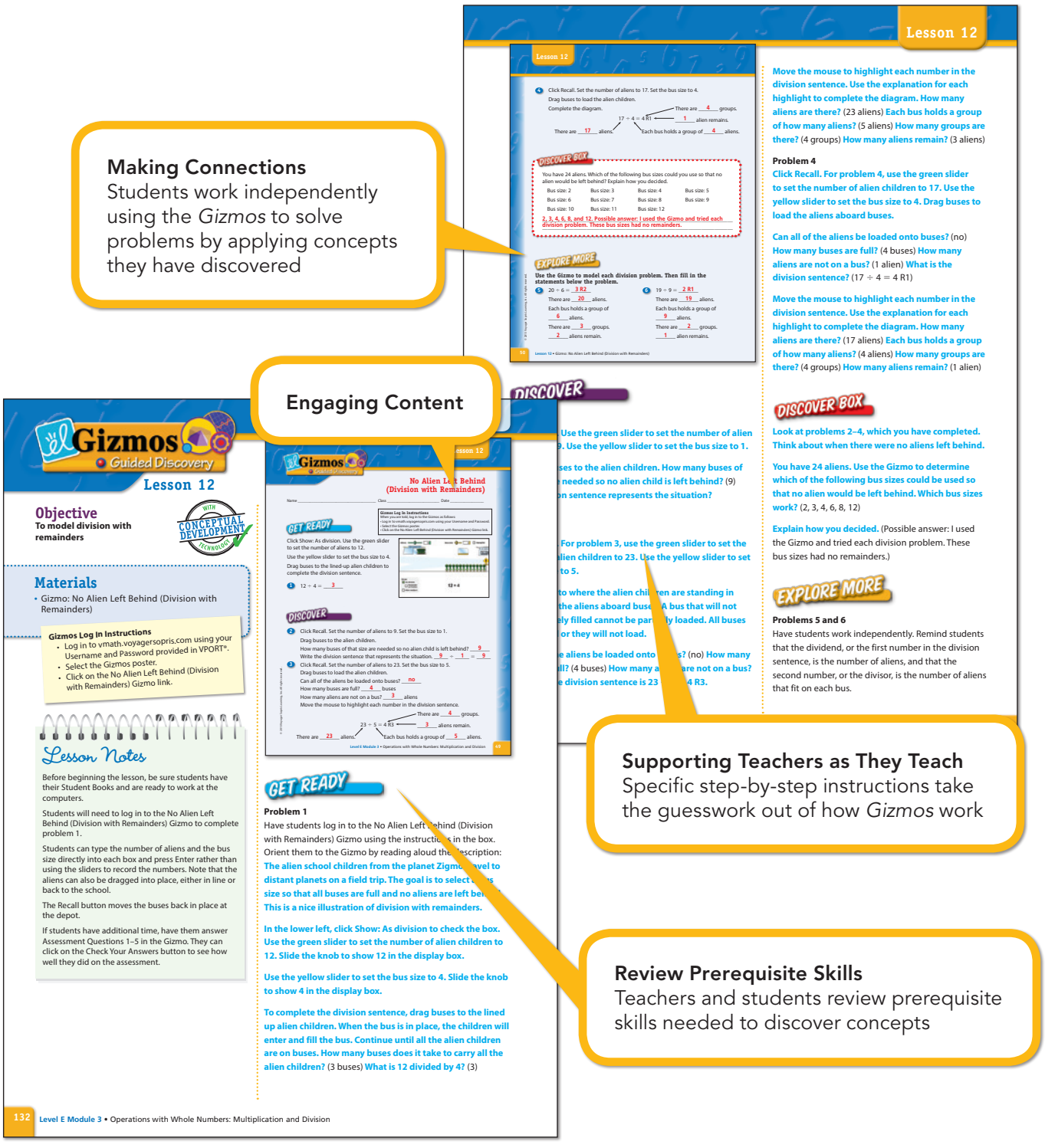
GIZMOS LESSONS REINFORCE CONCEPTUAL UNDERSTANDING WITH ONLINE DIGITAL MANIPULATIVES AND INTERACTIVE SIMULATIONS

Making Connections
Students work independently using the *Gizmos* to solve problems by applying concepts they have discovered

Engaging Content

Supporting Teachers as They Teach
Specific step-by-step instructions take the guesswork out of how *Gizmos* work

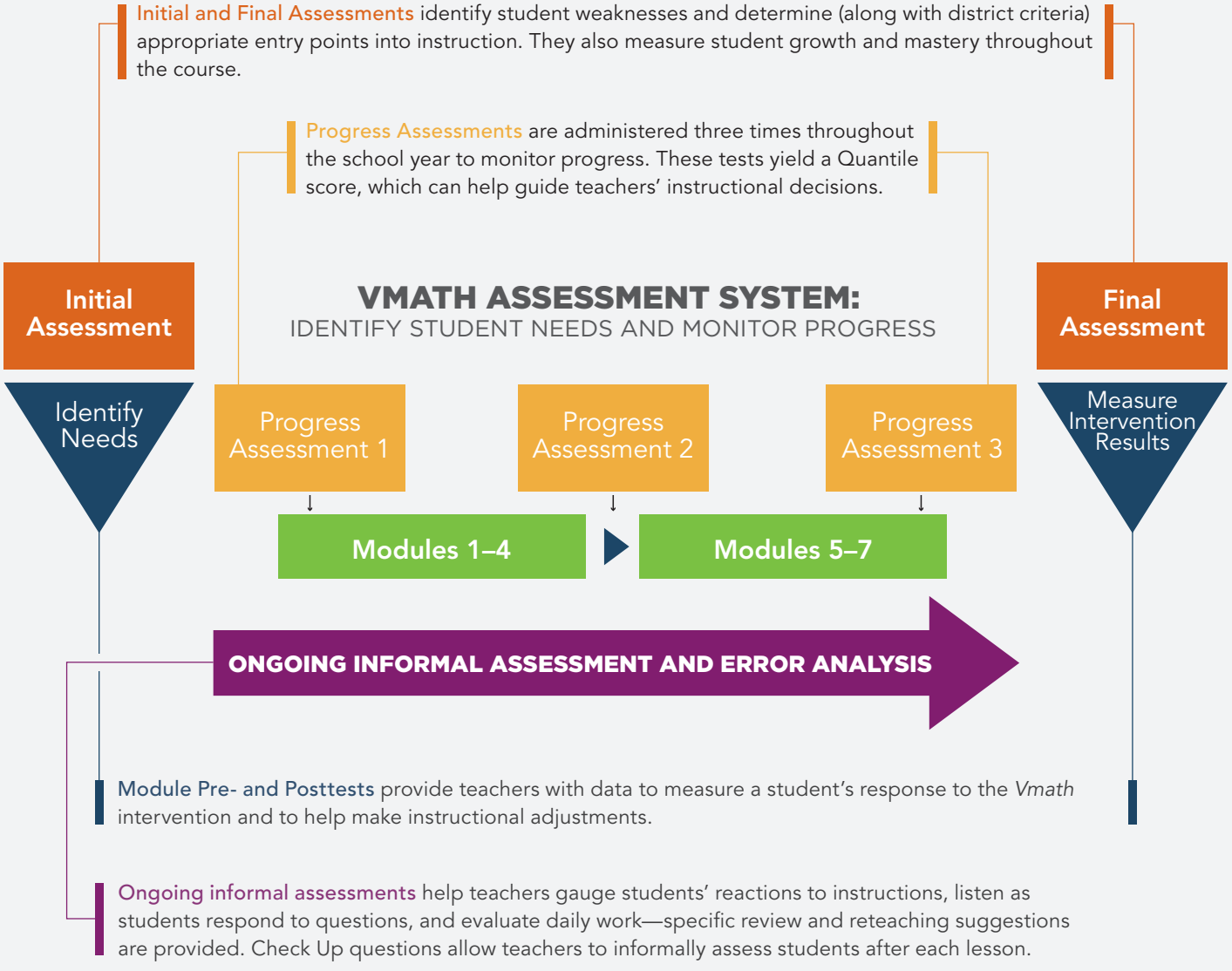
Review Prerequisite Skills
Teachers and students review prerequisite skills needed to discover concepts



POWERFUL ASSESSMENT INFORMS INSTRUCTION

The *Vmath* assessments help teachers identify student needs, differentiate instruction to accelerate learning, and monitor progress to ensure mastery.

The *Vmath* assessment system evaluates student learning and monitors progress throughout the intervention:



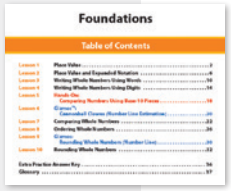
> *Vmath* was easy to implement. The materials were self-contained and ready to go. I loved the pre- and posttests because they enabled me to see what the children knew or didn't know.
>
> —Bernice Friesenhahn, Compensatory Education Teacher
> Olympia Elementary School, Universal City, TX

DIFFERENTIATION INFORMED BY DATA

Responding to Data

Vmath has built-in opportunities to ensure instruction meets specific student needs based on performance data.

	ASSESSMENT	IF...	THEN...	RESOURCES
ENTERING THE CURRICULUM	Initial Assessment	Students score below 60%	They would benefit from the Foundations Module at the beginning of each level	Foundations Module
BEGINNING OF EACH MODULE	Pretest	Students score above 70%	They are ready for the lessons in the module	Move forward with main module lessons
		Students score below 70%	They would benefit from additional skill acquisition in the Preskills Lessons	Preskills Lessons
WITHIN EACH MODULE	Lesson Check Ups or Planned Differentiation Days	Students do not demonstrate understanding of lesson content	They would benefit from Extra Practice, Reteach Lessons, or *VmathLive*	Extra Practice Activity *VmathLive*
AFTER EACH MODULE	Post-Test	Students score above 70%	No further instruction is needed—they are ready to move on to the next module	Move forward to the next module
		Students score below 70%	They would benefit from Reteach or *VmathLive* assignments	Reteach Lessons *VmathLive*



> Since using *Vmath* with the *VmathLive* component, we have seen a huge difference in our students from last year to this year. This year's sixth graders are so much further ahead.

—Claudia Askew, Special Education Teacher
Russellville Middle School, Russellville, AL

Integrated Support for Students with Special Needs

To enhance instruction for students with special needs, lesson-specific teaching strategies are included in the Teacher Editions. The teaching strategies for students with special needs provide teachers with adaptations to meet the learning challenges of these students.

Example

In this example, the teacher is reminded to reinforce the vocabulary being used in the lesson and to provide a visual model.

Students with Special Needs

Have students draw a number line for reference that shows −10 to 10, labeling the left arrow with the words *Lesser, Less than,* and *Least,* all of which begin with the letter *L*. This will be a visual cue for students to remember that numbers farther to the left on a number line are less than numbers toward the right.

Integrated Support for English Language Learners

To enhance instruction for English language learners, lesson-specific teaching strategies are included in the Teacher Editions. ELL strategies suggest detailed activities that focus on increasing student understanding of the language of mathematics.

English Language Learners

Use the VmathLive Animated Math Dictionary to review the terms *less than symbol* and *greater than symbol*. Demonstrate the vocabulary at the beginning of the lesson as students gather around the computer screen or through a projection system if possible.

To distinguish between the less than symbol, $<$, and the greater than symbol, $>$, show students that the less than symbol looks like a tilted 4 and the greater than symbol looks like a tilted 7 and that 4 is less than 7.

When working comparison problems, have students say the math sentences aloud, reinforcing the names for the symbols.

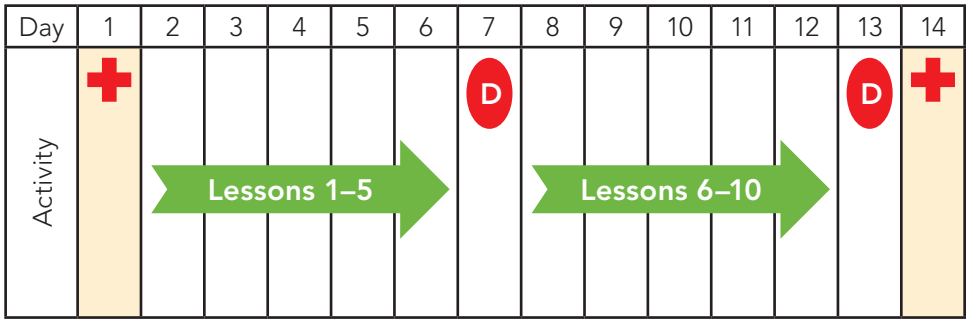
Example

In this example, the teacher is reminded of ways to build practice opportunities with mathematical language used in the lesson.

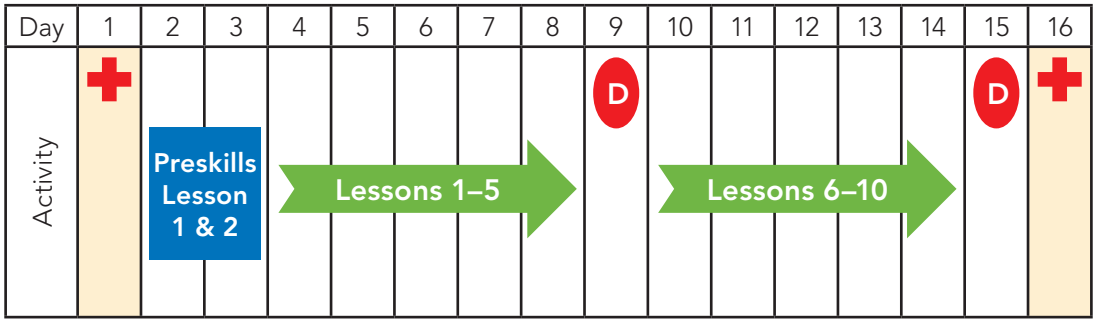
PACING GUIDE FOR MODULES PROVIDES FLEXIBILITY

The pacing models below reflect the implementation flexibility offered by *Vmath*. The lessons are designed for 45-minute sessions (recommended) or 20–30 minutes as a flexible option. The implementation plans designate time for differentiation and assessment.

45-Minute Implementation*

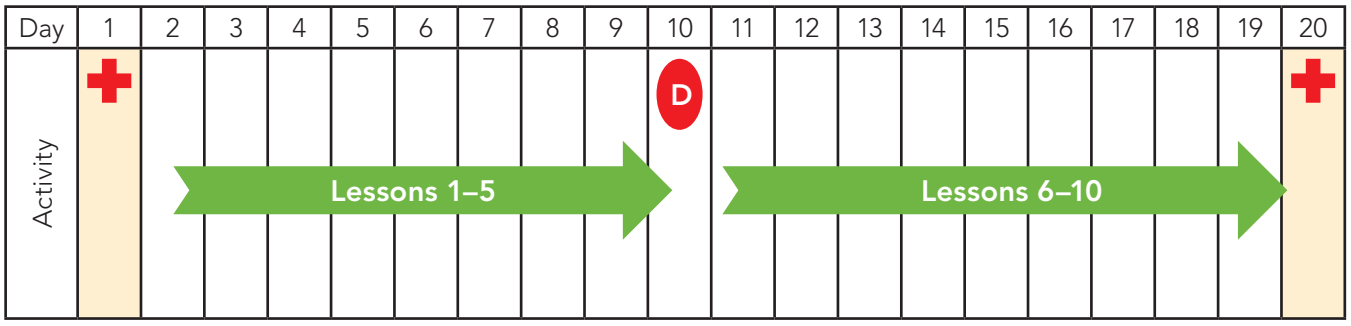


Example based on students scoring above 70 percent on Module Pretest



Example based on students scoring below 70 percent on Module Pretest

20–30-Minute Implementation*



Example based on students scoring above 70 percent on Module Pretest

KEY ✚ = Pre- and Posttest Ⓓ = Differentiation

* All models are approximations.

PACING AT THE LESSON LEVEL

Each of the different lessons included within *Vmath* has a predictable lesson structure and can be adjusted to a 20–30-minute implementation or a 45-minute implementation. They can also be adjusted to fit multiple scheduling options. The following charts outline some pacing suggestions at the lesson level based on various implementation models.

20–30-Minute Implementation

Vmath Lesson—2-Day Lesson Cycle

Day One	
Lesson Structure	
Get Started	6–8 minutes
Try It Together	6–12 minutes
Work On Your Own	8–10 minutes
Day Two	
Lesson Structure	
Get Started	2–3 minutes
Work On Your Own	6–10 minutes
Check Up	12–17 minutes

Math Flash Lessons (Levels D–I)

Taught entirely in one 20–30 minute block

Hands-on and *Gizmos* Lessons (Levels D–I)

Day One	
Lesson Structure	
Get Ready	5–10 minutes
Discover	15–20 minutes
Day Two	
Lesson Structure	
Get Ready and Discover Box	3–4 minutes
Discover Box	6–12 minutes
Explore More	11–14 minutes

IMPLEMENTATION SPECIALISTS WORK WITH DISTRICTS TO DEVELOP CUSTOM IMPLEMENTATION PLANS

45-Minute Implementation

Vmath Lessons—1 Per Day

Lesson Structure	
Get Started	5 minutes
Try It Together	10 minutes
Work On Your Own	15 minutes
Check Up	15 minutes

Lesson Structure (Levels D–I)	
Math Flash	20–30 minutes
VmathLive or Reteach	15–20 minutes

Hands-on and *Gizmos* Lessons (Levels D–I)

Lesson Structure	
Get Ready	5 minutes
Discover	15 minutes
Discover Box	10 minutes
Explore More	15 minutes

Each level in *Vmath* contains:

- 6 core modules
- 1 Foundational Module; used when students score below 70 percent on Initial Assessment

Each module contains

- 10 or 15 lessons
- 2 Preskills Lessons; used if students score below 70 percent on the module Pretest
- Built-in assessment and differentiation

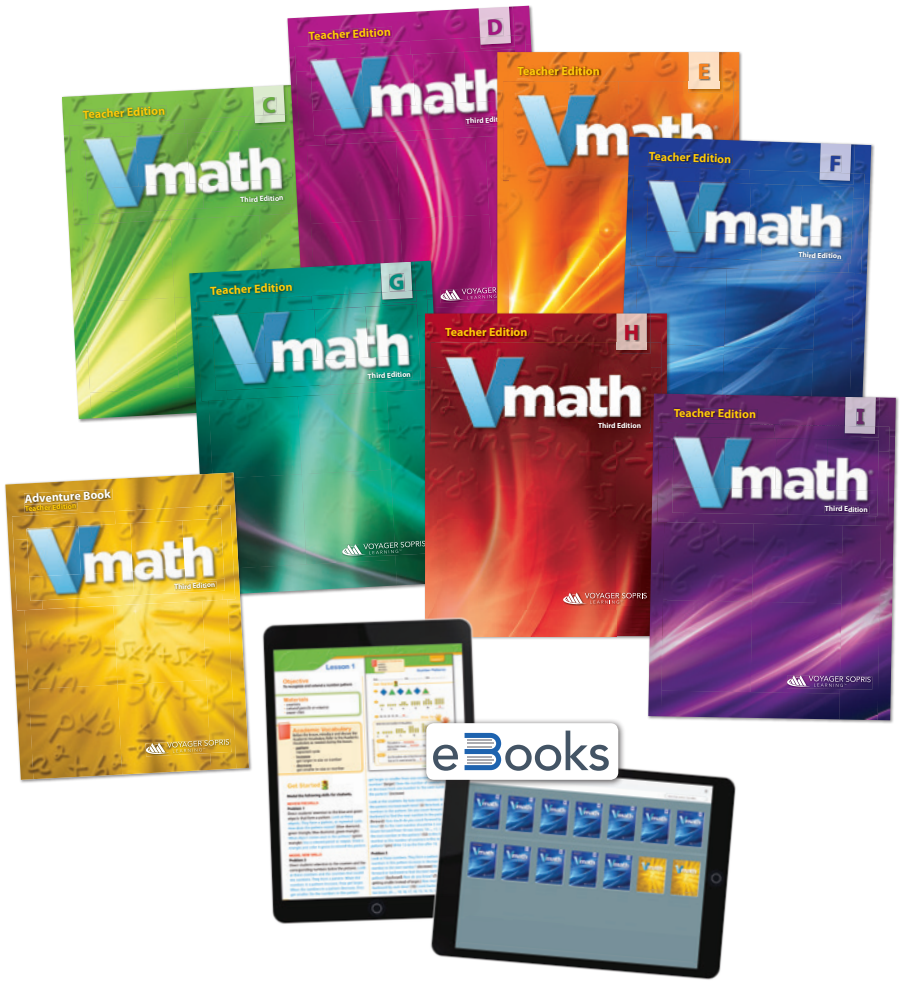
STREAMLINED TEACHER MATERIALS

Teacher Edition—includes all modules

Teacher Edition eBook

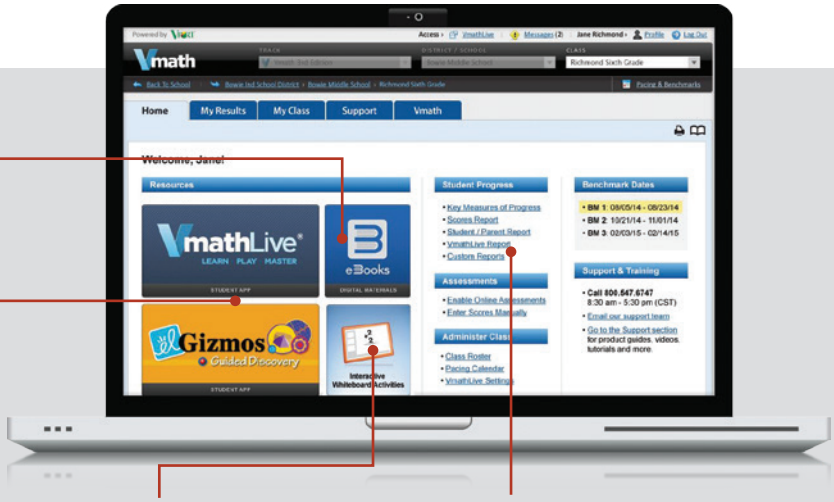
Assessment Guide eBook

Vmath Teacher Center



TEACHER CENTER

Everything in One Place



Access to eBooks

Access to online learning tools

Interactive whiteboard activities

Access to assessment and reporting tools

ENGAGING STUDENT MATERIALS

Student Math Pack—7 modules

- Student Math Pack eBook
- Reteach eBook
- Adventure eBook

Vmath Student Center—includes:

- *VmathLive*
- *Gizmos*
- *Vmath* Testing Center

STUDENT CENTER

Easy to Navigate

Access to assessments

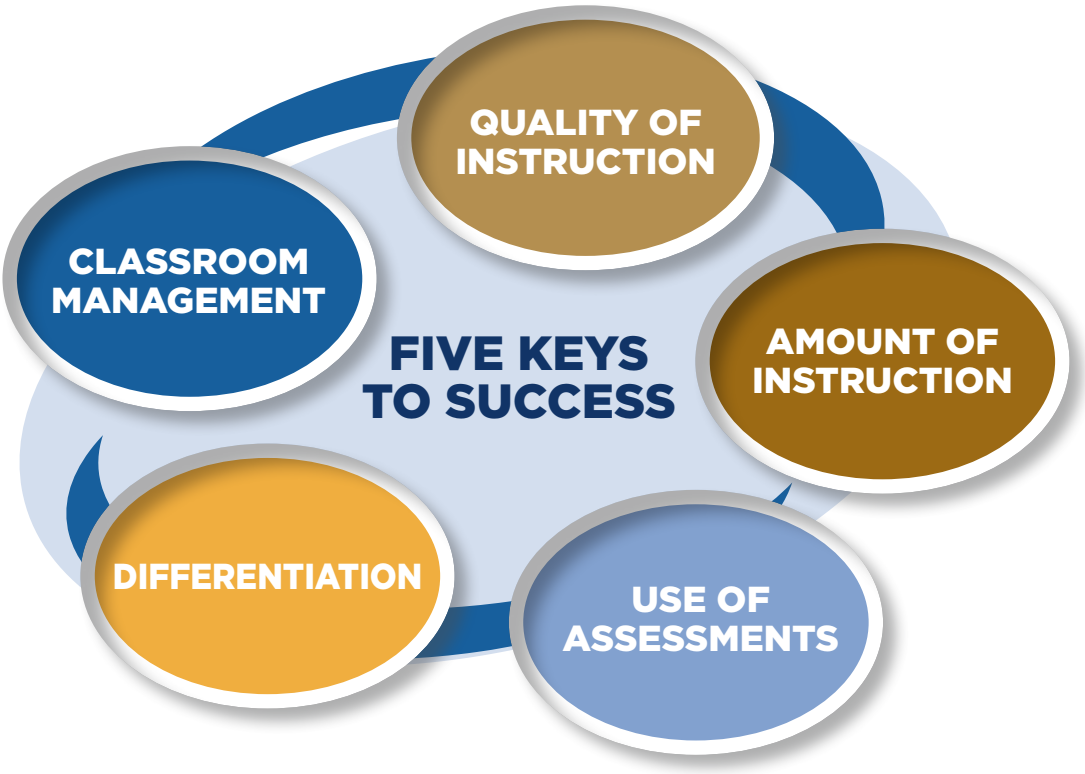
Access to eBooks

Access to online learning support

Vmath Third Edition

OUR GOAL:
PROVIDE THE HIGHEST LEVEL OF EDUCATOR SUPPORT TO INCREASE STUDENT ACHIEVEMENT

Service does not come in a box; it must be custom-built to meet the specific needs of districts, schools, administrators, and teachers. Firmly grounded in research, the Voyager Sopris Learning approach is built around the "Five Keys to Success," which form the foundation for a personalized strategy for planning, training, and ongoing support.



Our team specializes in partnering with schools and districts to build custom *Vmath* implementation support plans—including planning, training, and ongoing support—to ensure all stakeholders are prepared to implement and sustain *Vmath* implementation. **Key stages of *Vmath* implementation include:**

Visit www.voyagersopris.com/vmath to review training options and a comprehensive menu of services.

INSTRUCTIONAL PRINCIPLES SUPPORTED BY RESEARCH

Vmath uses widely accepted principles of effective intervention instruction for struggling students and provides a balance of conceptual understanding, fluency, and problem solving.

Vmath Instructional Principles

- ☑ Explicit Instruction
- ☑ Visual Models
- ☑ Conceptual Understanding
- ☑ Problem Solving
- ☑ Procedural Skill and Fluency
- ☑ Error Analysis
- ☑ Use of Assessments

VMATH REVIEWERS

Hilda Alejandro
Secondary Math Specialist
Edinburg CISD, Texas

Joiclyn Austin
Instructor of Mathematics
South Louisiana Community College, Louisiana

Sharon Brown
Title 1 Instructional Specialist
St. Mary Parish, Louisiana

Anne Clark
Academic Specialist
Irving ISD, Texas

Kelly Corcoran
Teacher
San Antonio ISD, Texas

Jack England
Math Coordinator
Gesher Jewish Day School, Virginia

Kerri Foster
Regional Math Coach
Polk County, Florida

Edward Goldstein
Assistant Principal
Tempe School District, Arizona

Susan Jones
School Improvement Coordinator, Mathematics
Bibb County School District, Georgia

Jane Lierman
Teacher
Lake Oswego, OR

Heidi Madill
Elementary Math Consultant
Rochester Schools, Michigan

Christina Patrin
Coordinator
Pflugerville ISD, Texas

Sara Snodgrass
Educational Consultant
Oklahoma

JaDawn Wagstaff
Director of Mathematics
Buffalo Public Schools, New York

Cindy Weegar
Teacher
Birdville ISD, Texas

SUPPORT STUDENTS IN REACHING RIGOROUS MATHEMATICS STANDARDS

Visit www.voyagersopris.com/vmath to access:

- Complimentary samples
- Video tour of technology components
- CCSS and state-specific standards correlations
- Flexible implementation options

Implement digitally, with print components, or with a combination of print and digital.

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