NORTHWEST ARCTIC BOROUGH SCHOOL DISTRICT

Ambler · Buckland · Deering · Kiana · Kivalina · Kobuk · Kotzebue · Noatak · Noorvik · Selawik · Shungnak
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NWABSD BOARD OF EDUCATION
CURRICULUM COMMITTEE MEETING

Conducted via Teleconference
Call 1-833-682-3239, Enter code: 374 437 247#

Agenda

March 7, 2024
11:00 a.m.

I. NWABSD Strategic Goal 2: Instructional Supports
- Program Adoption Update and Materials Approval
- Job Description Approval

II. Questions/Comments

Committee Members: Alice Melton-Barr, Carol Schaeffer

MISSION: To provide a learning environment that inspires and challenges students and employees to excel.
VISION: To graduate all students with the knowledge, skills, and attitudes necessary for a successful future.

MEMORANDUM

TO: NWABSD Board of Education Members

DATE: February 28, 2024

NUMBER: 24-113

FR: Office of the Superintendent

SUBJECT: Approval of Purchase- *Math Materials*

STRATEGIC PLAN/BOARD GOAL:
NWABSD Strategic Goal 2: Instructional Supports

ABSTRACT:

Board approval is required for purchases that exceed $50,000.

ISSUE:

At issue is the Board's approval of math adoption expenses from publishers Carnegie, Innovative Concepts, Inc, Mind Education, and McGraw-Hill to adopt math program materials and textbooks. Total purchase not to exceed $975,000.

BACKGROUND AND/OR PERTINENT INFORMATION:

Committee's Recommendations for Adoption

Publisher	Program	Grade Levels
Carnegie	*Clear Math* *6-year student online subscription bundle.*	K-5
Carnegie	MATHia Adventure (Supplement) *6-year student online subscription bundle*	K-5
Innovative Concepts, Inc.	TouchMath (Intervention) *3-year print & digital subscription bundle*.	PK-8
Mind Education	ST Math (Supplemental)	K-5
McGraw-Hill	*Reveal Math* Algebra 1, Algebra 2, Geometry, and Integrated Math *6-year student online subscription bundle.*	6-12

6-year bundles cover student consumables and online licenses through the 2030-2031 school year

These items were budgeted for and approved as part of our ESSER spending provided by the U.S. Department of Education.

Funding: ESSER III Fund 252

ALTERNATIVES:

1. Approval of math adoption expenses from publishers Carnegie, Innovative Concepts, Inc, Mind Education, and McGraw-Hill to adopt math program materials and textbooks. Total purchase not to exceed $975,000.

2. Disapproval of math adoption expenses from publishers Carnegie, Innovative Concepts, Inc, Mind Education, and McGraw-Hill to adopt math program materials and textbooks. Total purchase not to exceed $975,000.

3. Take no final action.

ADMINISTRATION'S RECOMMENDATION:

The administration recommends the board approves math adoption expenses from publishers Carnegie, Innovative Concepts, Inc, Mind Education, and McGraw-Hill to adopt math program materials and textbooks. Total purchase is not to exceed $975,000.

After careful review and analysis, the elementary team strongly recommends the adoption of the Clear Math K-5 Carnegie Learning program for implementation across our district. This comprehensive program has been identified as the most suitable solution to meet the diverse needs of our students within the NWABSD.

Rationale:
The Clear Math K-5 Carnegie Learning program offers a wealth of resources and instructional strategies designed to enhance student learning and teacher effectiveness. Key features that make this program stand out include:

1. **Clear and User-Friendly Resources:** The teacher and student resources are thoughtfully structured, providing clear learning objectives, standards alignment, and comprehensive lesson plans. They are designed to accommodate various teaching modalities, including whole group, small group, and individual instruction.
2. **Diverse Instructional Approaches:** The program incorporates a variety of instructional approaches such as lectures, hands-on activities, application exercises, skill-building tasks, critical thinking challenges, and self-reflection opportunities. This ensures engagement and promotes deeper understanding among students.
3. **Embedded Interventions and Differentiation:** The program includes built-in interventions tailored to students' needs, allowing for easy review, evaluation, and differentiation. Reteaching activities are provided at varying levels of difficulty (below, on, and challenge) to accommodate diverse learners.
4. **Comprehensive Scope and Sequence:** With approximately 120-140 days of lessons spread across five modules, the program offers ample time for pre-teaching, reteaching, and assessment. Each lesson is meticulously structured, addressing specific standards and indicating the percentage of standard coverage.
5. **Accessible Online Resources:** The online platform complements the print materials, providing digital copies of teacher manuals, assessments, lesson activities, and interactive tools. The platform also offers valuable insights through reports, enabling teachers to identify and address students' specific needs effectively.
6. **Student-Centered Approach:** The student materials feature clear learning objectives, engaging activities, and diverse ways to demonstrate understanding. Games, family letters, and verbal processing opportunities enhance conceptual development and foster a positive learning environment.
7. **Interventions, Challenges, and Assessments:** The program includes targeted interventions based on student data, challenge problems to promote higher-order thinking, and comprehensive assessments designed to measure student success accurately.

In summary, the Clear Math K-5 Carnegie Learning program offers a robust and adaptable framework that aligns with our district's educational goals and values. Its emphasis on clarity, differentiation, and student engagement makes it a highly effective tool for promoting mathematical proficiency among our K-5 students.

CLEAR Math®

Elementary

CARNEGIE LEARNING

Grades K–5 **Welcome to an exclusive preview of ClearMath Elementary!**

Play together. Think together. Learn together.

Powered by play

Re-imagine the math classroom as a place where meaningful play taps into young learners' curiosity and ignites a love of mathematics. Engaging lessons, centers, game-based online learning, and instructional supports encourage investigations and discoveries that develop inventive and persistent thinkers.

MATHia Adventure //CODiE// 2023 SIIA CODiE WINNER

Results rooted in research

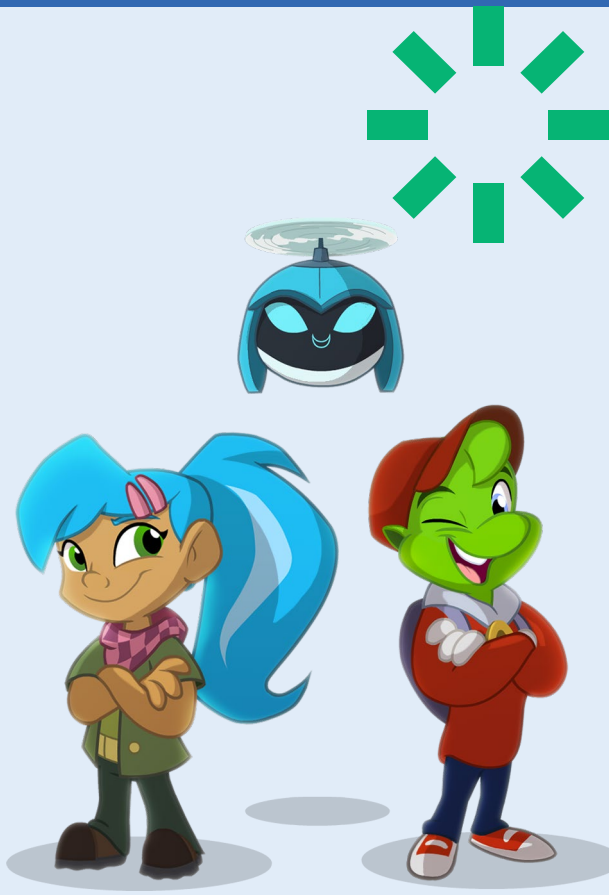
Nurture children into high-achieving, creative math thinkers with a research-backed approach focused on how learning occurs. Intentionally developed lessons strengthen executive functions and allow students to transfer new knowledge outside of a single concept, giving them a deep understanding of math and how it appears in the world around them.

More math moments

With creative problem-solving and mental math routines, and imaginative MATHia Adventure digital games, mathematical thinking is intentionally interwoven throughout the day to make meaningful learning happen anytime—not just when it's scheduled.

Tools tailored to teachers

Straightforward supports are designed with educators in mind, so all teachers can implement with ease, and more importantly, teach with confidence. Lessons and center activities allow teachers to engage students with new concepts, supported by point-of-use facilitation notes, digital tools, and ongoing assessment opportunities.



View the ClearMath Elementary overview video:
www.carnegielearning.com/cmes-video ▸

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CARNEGIE LEARNING

CLEAR Math®

ClearMath Elementary

Play together. Think together. Learn together.

K–5 Core Math Solution

Program Overview

Powered by play

Re-imagine the math classroom as a place where meaningful play taps into young learners' curiosity and ignites a joy of learning. Engaging lessons, centers, game-based online learning, and instructional supports encourage investigations and discoveries that develop inventive and persistent thinkers.

What is ClearMath Elementary?

ClearMath Elementary is a comprehensive core solution that leverages—and fosters—students' natural interest in learning. It balances the development of conceptual understanding, procedural fluency, and productive habits of mind in children.

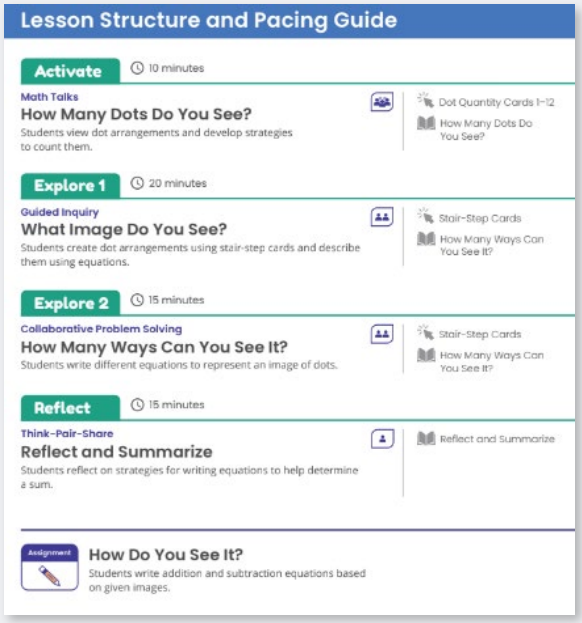
Students develop math confidence through hands-on lessons, collaboration, games, centers, and the game-based software MATHia® Adventure. As they explore, talk about math, and learn from each other, young learners have the freedom to focus on the journey of mathematics, rather than just the solution.

A suite of implementation notes, embedded supports, and assessments empower teachers to facilitate high-quality instruction for a community of diverse learners.

Tools tailored to teachers

ClearMath Elementary offers instructional supports designed with teachers in mind, ensuring they can implement with ease, and more importantly, teach with confidence.

A structured series of lessons allow teachers to engage students with new concepts, supported by point-of-use facilitation notes, planning and pacing resources, and recommendations for re-engagement.



Results rooted in research

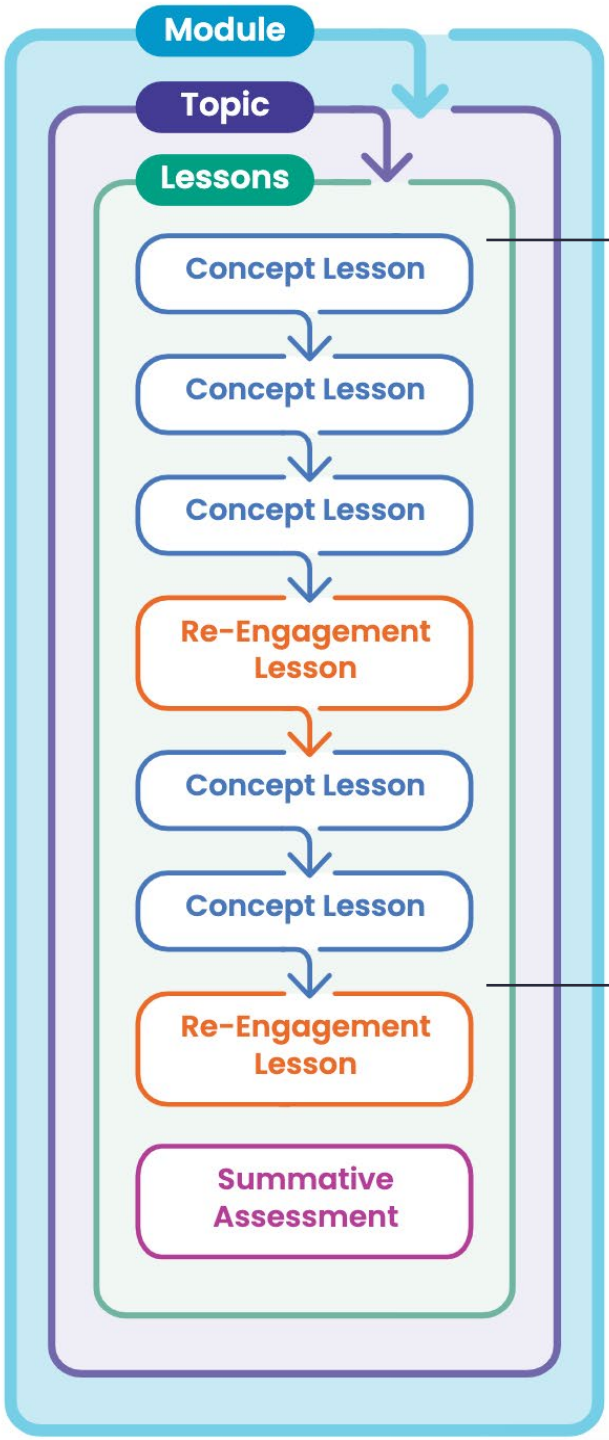
ClearMath Elementary nurtures children into high-achieving, creative math thinkers with a research-backed approach focused on how learning occurs.

Intentionally developed lessons strengthen executive functioning skills and allow students to transfer new knowledge outside of a single concept, giving them a deep understanding of math and how it appears in the world around them.

A re-imagined approach

ClearMath Elementary's instructional model combines practical instruction with "minds-on" practice and meaningful play to develop conceptual understanding that lasts.

Students learn new concepts and skills over a series of lessons and then pause to reflect on their learning.



In **Concept Lessons**, students engage in new learning. They explore math with their teacher via hands-on and game-based activities to develop conceptual understanding and see how it appears in everyday life. Teachers have the opportunity to collect data to plan for upcoming Re-Engagement lessons.

Power of the Pause

Ensure students are keeping up, not catching up.

Re-Engagement Lessons use ready-made Explore Centers, including MATHia Adventure, in order to allow students to pause to clarify, solidify, or stretch their learning. Center recommendations are based on assessment data and aligned with each lesson's goals.

More math moments

With creative problem-solving, daily mental math routines, and imaginative MATHia Adventure digital games, mathematical thinking is intentionally interwoven throughout the day to make meaningful learning happen anytime—not just when it's scheduled.

Daily Math Routines

Headline Stories include an open-ended problem that promotes creative problem-solving and deductive reasoning.

Mental Math routines are highly focused exercises that build mastery and skill fluency in critical arithmetic foundations.

MATHia Adventure

Inspired by how children see the world, MATHia Adventure unites play and pedagogy like no other digital learning solution.

Students play in a supportive digital environment where they're having fun—not worrying about making mistakes. Instead, feedback and game-based incentives motivate them to stretch their math skills.

As students explore new worlds in Zorbit's Math Adventure and Mathstoria, teachers get real-time data insights in the Clear Learning Center to inform their next instructional steps.

Assessment that guides instruction

Understanding how students learn and grow is an essential component of any classroom—that's why ClearMath Elementary incorporates assessment as a regular part of the instructional cycle.

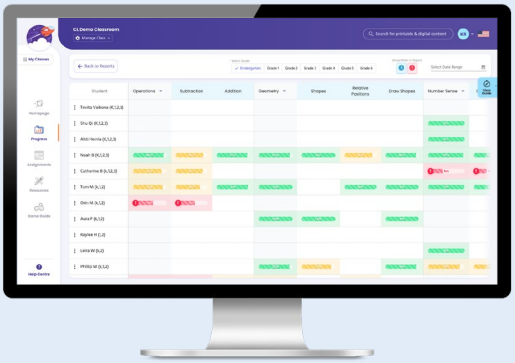
ClearMath Elementary delivers a variety of assessments, supported through two-way communication between observation and student self-assessment, situated before, during, and after the learning experiences. Teachers can flexibly monitor student progress when and how it's best for their classroom to drive real-time adjustments, next steps, insights, and measurements.

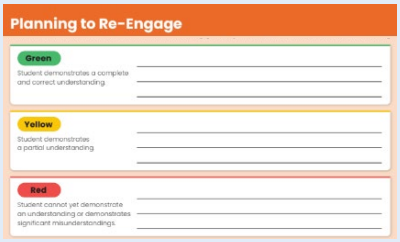
Teacher Data Collection

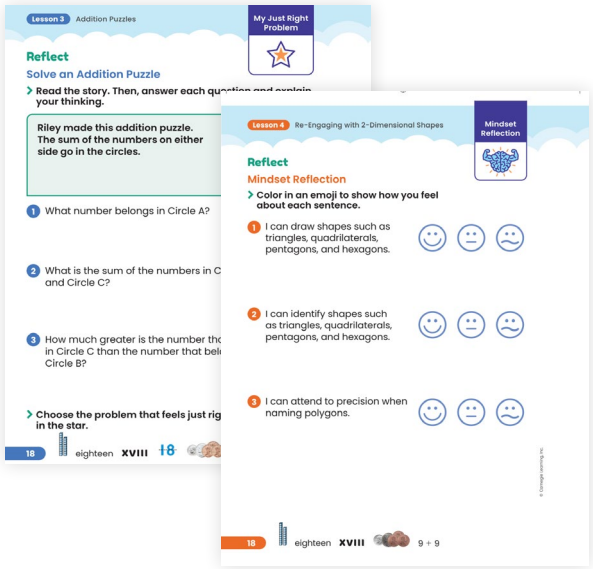
MATHia Adventure Reports: Online reports that highlight student progress and offer suggestions for areas of additional support.

Planning to Re-Engage: An assessment tool to record daily student self-reflection scores and observations.

Planning for Centers: Use scores from reflect activities and observations to place students in the explore center that best supports their learning goals.







Student Self-Reflection

My Just Right Problem: Three related problems that allow student choice and help build confidence.

Mindset Reflection: Encourage students to reflect on learning goals and celebrate progress.

ClearMath Elementary components

Teacher Resources

Teacher Implementation Guide (TIG)
Available in print and digitally

The TIG provides easy-to-implement resources for planning and point-of-use facilitation.

- Module and Topic Overviews
- Lesson Resources
  - Step-by-step guidance to support facilitation and deepen understanding
  - Embedded Supports
    - Questions to support discourse
    - Differentiation strategies
    - Common misconceptions
    - Developing mathematical language
    - Multilingual learner support
    - Teacher stories

Clear Learning Center

Digital access to resources for planning and implementation support.

- Interactive digital instructional materials
- MATHia Adventure
- Class and student-level reports
- Facilitation notes for Daily Math Routines
- Additional lesson resources

Assessments
Available digitally (Grades 3–5) and PDF (all grades)

A suite of asset-based assessments used to support each student at their individual learning level.

- Progress monitoring
- Readiness
- Formative
- Summative

Manipulative Kits

Grade-level kits include manipulatives to support learning.

Professional Learning

Videos to support game-based learning and easy access to our team of professional learning facilitators ensure that you never feel alone on your implementation journey.

Student Resources

Student Resource Book (SRB)
Available in print and digitally

Student Resource Books are an all-in-one tool for learning and self-reflection.

- Topic Introductions
- Concept and Re-Engagement Lessons
- Assignments

MATHia Adventure

A game-based learning software to use during Explore Centers and free play.

- Zorbit's Math Adventure (K–3)
- MATHstoria (4–5)

Student Practice Book
Available in print and digitally

Student Practice Books reinforce each lesson's concepts and support learning at home.

- Lesson practice pages
- Family guides for each topic

Videos

How-to videos assist students and caregivers in playing games and utilizing manipulatives and tools.

Explore the full print and digital solution here:

www.carnegielearning.com/cmel

We're all in on math education

Carnegie Learning provides K–12 core and supplemental math solutions and out-of-this-world professional learning programs built to seamlessly work together so students are able to think, learn, and do their best.

How do we know that every student is a math person?

We've got 25 years of experience as the leading provider of research-based math solutions—proven to deliver up to 2x performance improvement on standardized tests—and a team of cognitive and computer scientists who are dedicated to tirelessly finding new and better ways to support teachers and students.

That's how we know every student is a math person.

Continue your exploration here:

www.carnegielearning.com/math ▸

CARNEGIE LEARNING

WWY224921 08/23

After careful review and analysis, the middle/high school curriculum review team strongly recommends the adoption of McGraw-Hill's Reveal Math learning program for 6-12 implementation across our district. This program has been identified as the most suitable solution to meet the diverse needs of our students within the NWABSD.

In considering the adoption of the proposed McGraw Hill – Reveal Math materials, the board should consider several key features that align with our educational goals and instructional strategies.

1. **Scope & Sequences**: The provided scope and sequences offer a structured framework that ensures comprehensive coverage of mathematical concepts, fostering a coherent learning progression for students.
2. **Suggested Pacing:** The suggested pacing guides provide educators with a roadmap for effectively managing instructional time and ensuring adequate coverage of content throughout the academic year.
3. **Assessment Tools**: The array of assessment tools, including diagnostic, formative, and summative assessments, empowers teachers to effectively monitor student progress, identify areas of strength and weakness, and adjust instruction accordingly.
4. **Interactive Presentations:** Interactive presentations engage students in active learning experiences, promoting deeper understanding and retention of mathematical concepts through dynamic, multimedia resources.
5. **Print Interactive Student Addition**: The print interactive student edition offers students a tangible resource that complements digital learning experiences, catering to diverse learning preferences and needs.
6. **Differentiation Activities:** Differentiation activities provide opportunities for personalized learning, allowing educators to tailor instruction to individual student needs and abilities.
7. **CCSS Standard Alignment:** Alignment with Common Core State Standards ensures that instructional materials are grounded in rigorous academic expectations, facilitating consistency and coherence across classrooms.
8. **Technology-Based Tools**: Integration of technology-based tools such as LearnSmart, ALEKS, Web Sketchpad Activities, and Desmos enhances the learning experience by providing adaptive instruction, visualization support, and interactive problem-solving tools.
    a. **LearnSmart**: Adaptive learning technology compiles student data and offers tailored resources to support mastery of mathematical concepts.
    b. **ALEKS**: Integrated instructionally actionable data enables targeted instruction for individual students, groups, or the entire classroom.
    c. **Web Sketchpad:** Visualization software fosters problem-solving skills and aids in conceptual understanding.
    d. **Desmos**: Digital graphing calculator enhances mathematical exploration and analysis.
9. **Instructional Model:** The provided instructional model offers a structured framework for lesson delivery, encompassing key elements such as warm-ups, exploration, examples, reflection, and assessment, promoting a balanced approach to teaching and learning.
10. **Assessment Options:** A variety of assessment options, including diagnostic, formative, and summative assessments, cater to diverse assessment needs and provide comprehensive insight into student learning and achievement.

Mc Graw Hill

Program Overview

Grades 9–12

Reveal MATH™

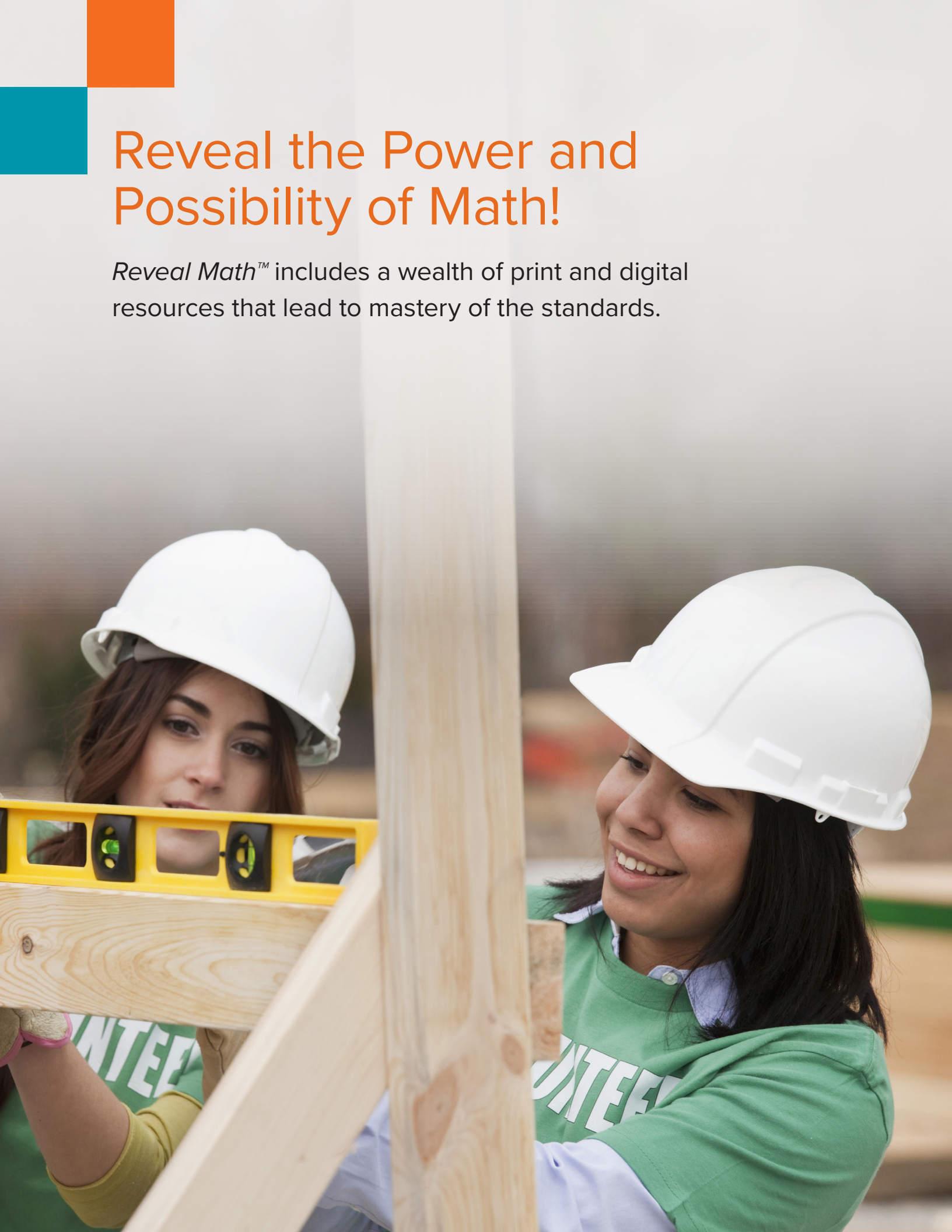
Algebra 1 • Geometry • Algebra 2

Reveal the Full Potential in Every Student

revealmath.com/9-12

Reveal the Power and Possibility of Math!

Reveal Math™ includes a wealth of print and digital resources that lead to mastery of the standards.



Every classroom is unique, and each student is different in terms of knowledge level and learning style. Teachers need a set of tools as diverse as their students. *Reveal Math* meets this need by providing students the positive mindset, confidence, and skills to achieve mastery of math standards while giving teachers an effective, flexible way to assess understanding and adapt instruction for every learner. Informed by the latest research on how students learn best, *Reveal Math* ensures students don't just meet the standards—they master them!

Reveal **curiosity** with mathematical exploration and discovery that deepens conceptual understanding.

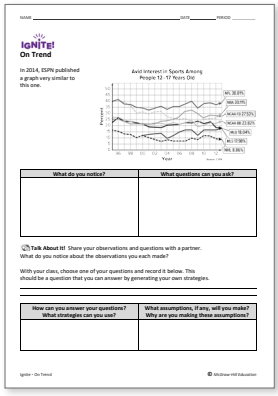
Reveal **understanding** with insightful instructional resources to more effectively differentiate and promote a positive student mindset.

Reveal **possibilities** with purposeful technology that creates an active classroom experience.

The Science of Learning Meets the Art of Teaching

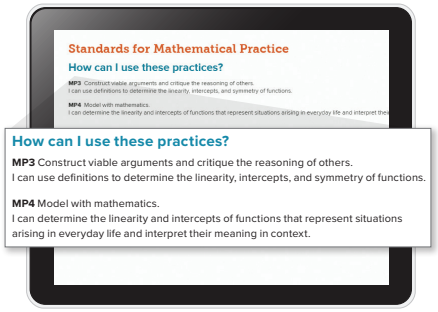
The evolving field of educational research drove the approach of *Reveal Math.* Our team was inspired by esteemed publications such as *Principles to Actions* (NCTM), *Mathematical Mindsets* (Jo Boaler), and *Making Sense of Math* (Cathy Seeley), as well as learning models including Bloom's Taxonomy and Webb's Depth of Knowledge Guide. This solid foundation of academic research and direct feedback from hundreds of educators just like you ensures that *Reveal Math* represents the cutting-edge of best practices in mathematics instruction.

Research-Based Best Practices



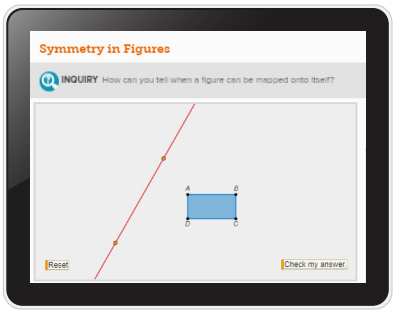
Spark Students to Ask "Why?"

Ignite! Activities are designed to spark student curiosity and motivate them to ask questions, solve complex problems, and develop a can-do approach to mathematics.



Build Students' Confidence in Their Abilities

Learning targets in the form of **"I Can"** statements appear at the beginning of each lesson to communicate the lesson objective in student-friendly language.



Nurture Curiosity with Rich Tasks

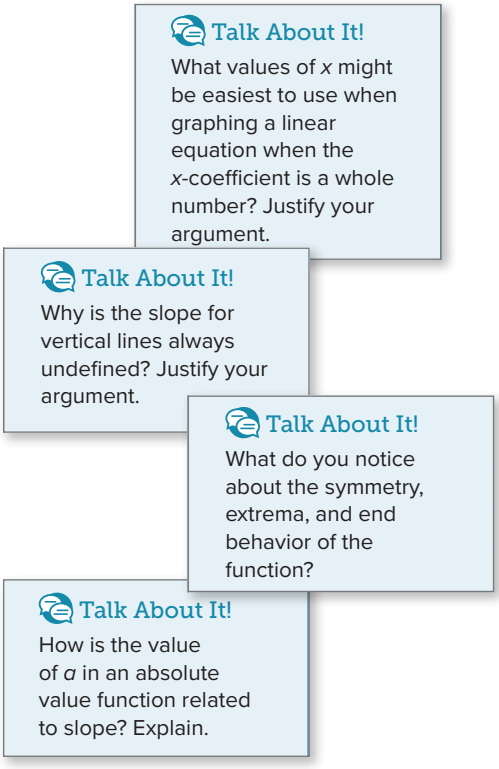
Online **Explore** activities begin with an open-ended question and require deep conceptual thinking from the learner. At the end of the **Explore** activity, students apply their learning in order to answer the **Inquiry Question.** The focus is on student exploration and reasoning, not just getting the right answer.

The expert advisor team behind *Reveal Math* includes thought leaders at the forefront of mathematics education.

Cathy L. Seeley, Ed.D.
Author, Educator, and NCTM President 2004–2006

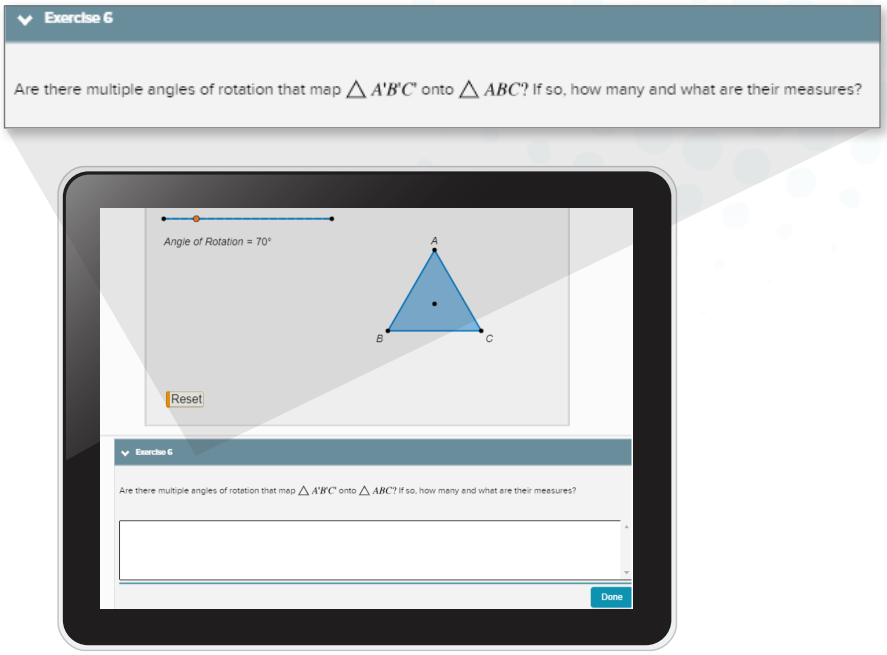
Raj Shah, Ph.D.
Founder of Math Plus Academy, a STEM enrichment program

Reveal Math teaches students *how* to think—not *what* to think!



Improve Communication While Deepening Comprehension

Talk About It! prompts build mathematical discourse skills as students learn to clarify their thinking and defend their rationale.



Teach the Value of Perseverance

Problems with multiple solution paths encourage **productive struggle** and challenge student thinking.

Cheryl R. Tobey, M.Ed.
Mathematics Program Director at Maine Mathematics and Science Alliance (MMSA)

Nevels Nevels, Ph.D.
PK–12 Mathematics Curriculum Coordinator for Hazelwood School District

Dinah Zike, M.Ed.
President of Dinah.com in San Antonio, Texas, and Dinah Zike Academy

Walter Secada, Ph.D.
Professor of Teaching and Learning at the University of Miami

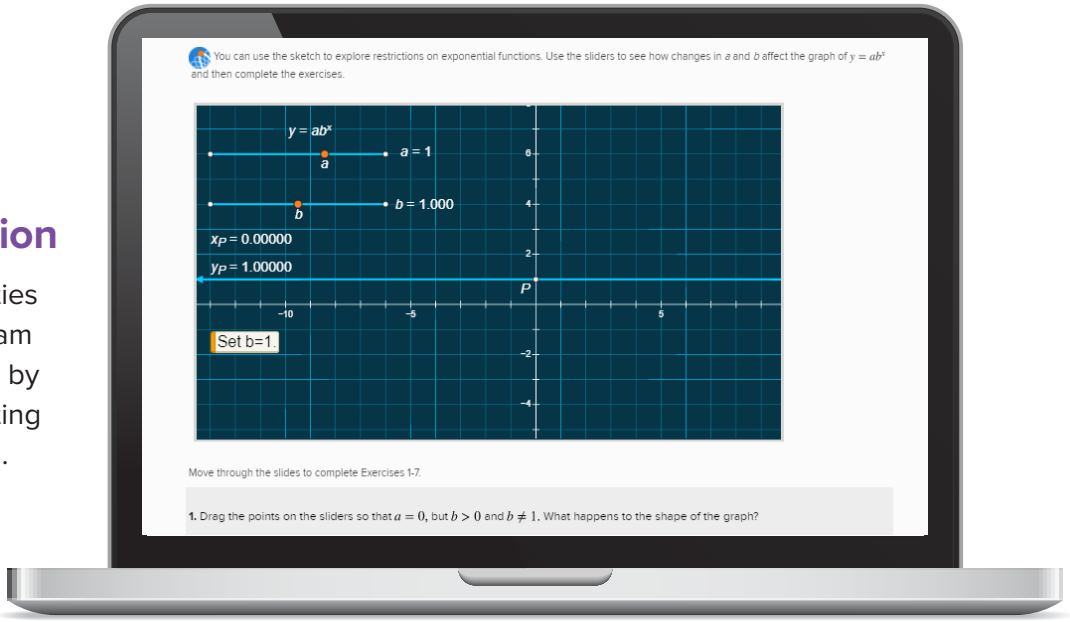
What If Math Class Were the Most Exciting Class of the Day? It Can Be!

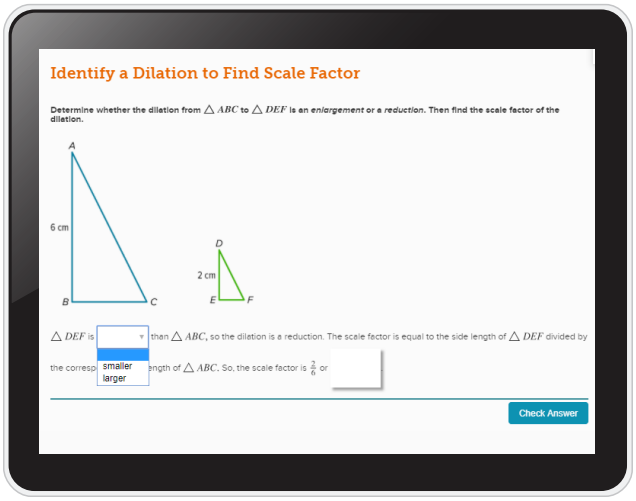
Reveal Math supports both low-tech and high-tech classrooms. The blended print and digital instructional model captures the best of both modalities and brings them together in a seamless experience that makes math meaningful for your students.

Web Sketchpad®

Visualize Math Concepts in Action

Web Sketchpad® activities included with the program enhance understanding by dynamically demonstrating math concepts in action.





Prepare Students for Computer-Based Testing

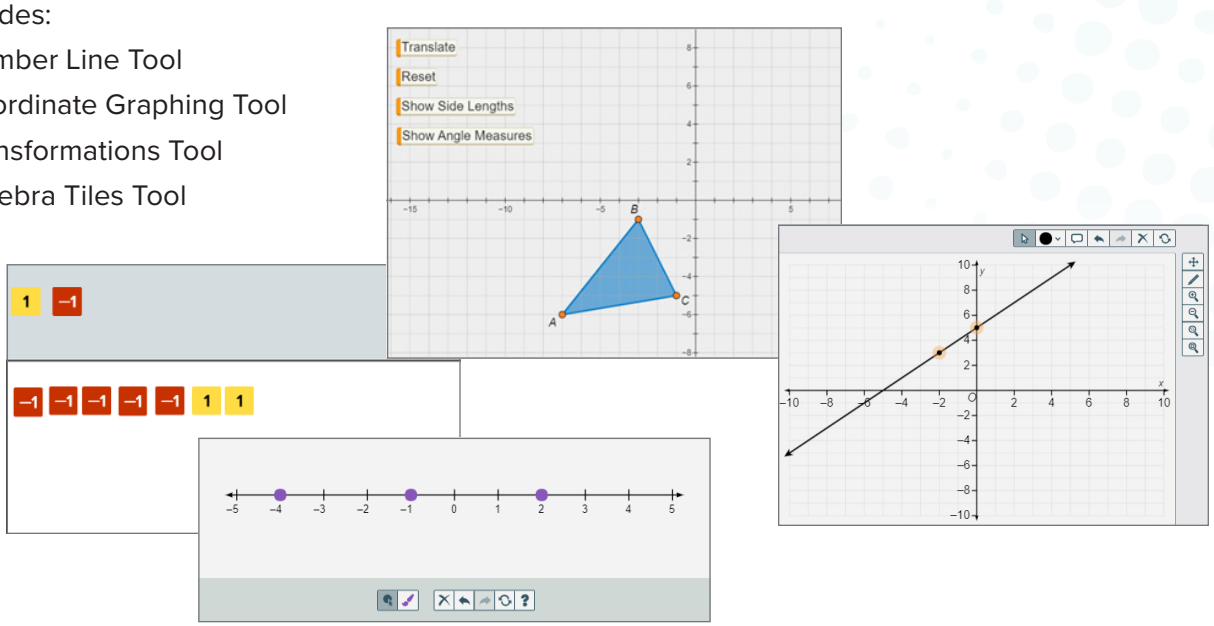
Technology-enhanced items provide students the valuable practice they need to master computer-based assessments. These items include:

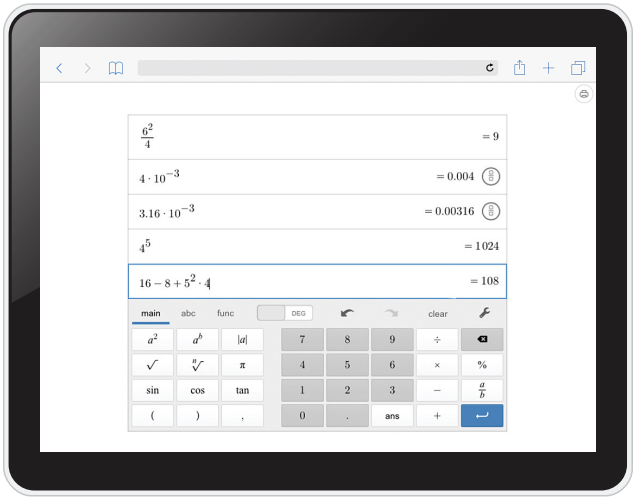
- Drag-and-drop
- Equation editor problems
- Multiselect
- Open response

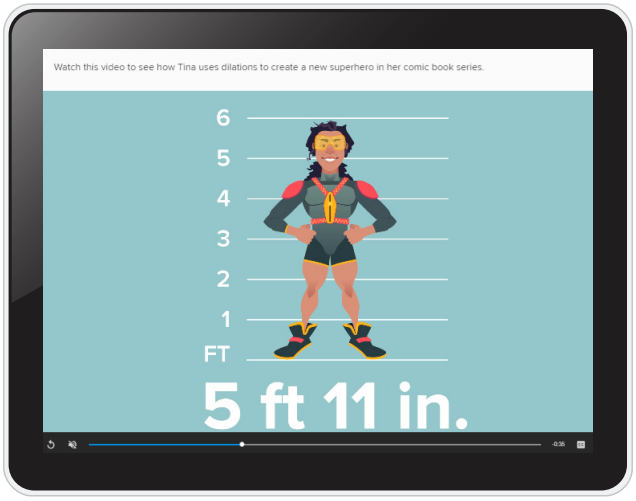
Utilize Digital Tools for Problem-Solving

Embedded within lessons, this convenient collection of **eTools** builds a bridge from conceptual understanding to procedural fluency. It includes:

- Number Line Tool
- Coordinate Graphing Tool
- Transformations Tool
- Algebra Tiles Tool







desmos

Explore, Model, and Apply Math

The best-in-class **Desmos scientific calculator,** easily accessible in *Reveal Math,* allows students to utilize the same resource that appears on many common standardized tests.

Motivate with Truly Enjoyable Technology

Designed with student engagement in mind, the digital resources in *Reveal Math* include **animations, videos,** and **interactive problems** to enhance context and learning.

Drive Learning With Student-Centered Instructional Tools

In *Reveal Math,* the Teacher Edition centers around opportunities to promote mathematical discourse, collaboration, and a positive student mindset.

Develop Habits of Mind With Standards for Mathematical Practices Tips

These strategies illustrate ways teachers can integrate the practices in their classroom in a practical and meaningful way.

Encourage Student Discourse

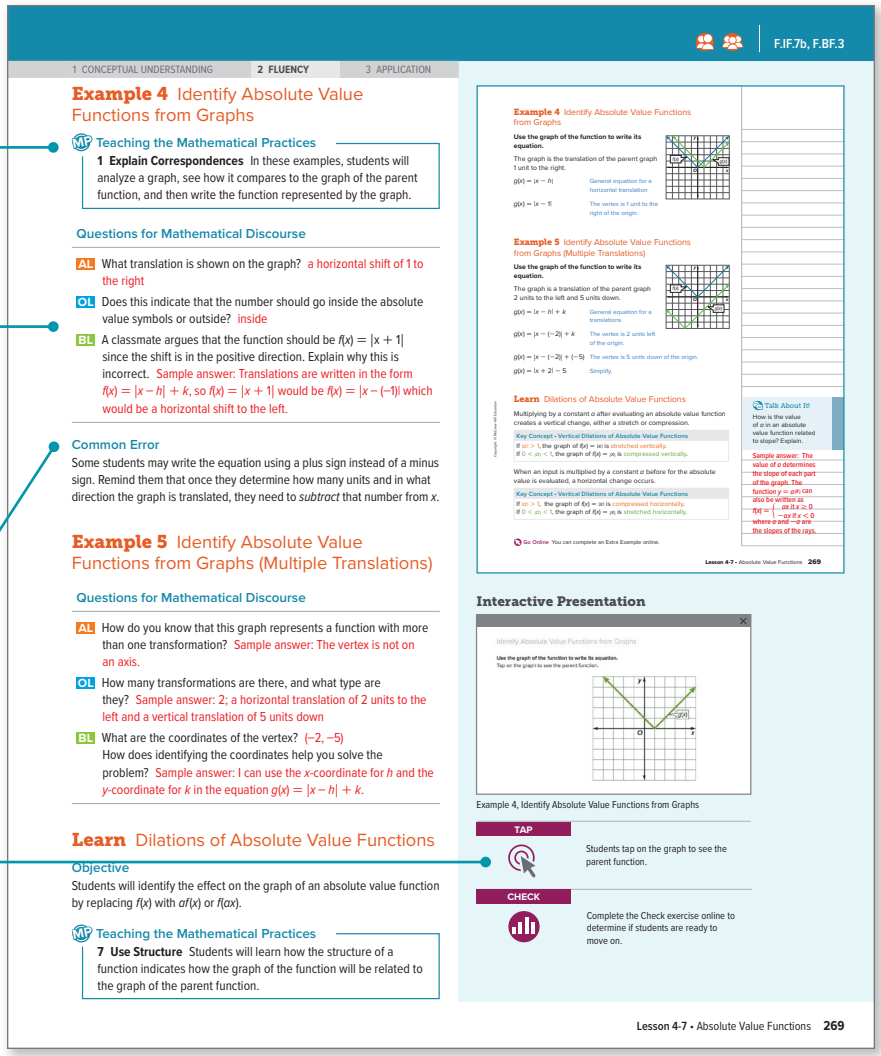
Questions for Mathematical Discourse provide point-of-use discussion prompts that teachers can use to facilitate classroom discussion.

Identify Student Misconceptions

Common Error tips help teachers identify where students may be making mistakes.

Integrate Technology in a Way That Makes Sense

User-friendly tips in the Teacher Edition suggest when and how to integrate technology purposefully.



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1 CONCEPTUAL UNDERSTANDING | 2 FLUENCY | 3 APPLICATION

Example 4 Identify Absolute Value Functions from Graphs

Teaching the Mathematical Practices

1 Explain Correspondences In these examples, students will analyze a graph, see how it compares to the graph of the parent function, and then write the function represented by the graph.

Questions for Mathematical Discourse

AL What translation is shown on the graph? a horizontal shift of 1 to the right

OL Does this indicate that the number should go inside the absolute value symbols or outside? inside

BL A classmate argues that the function should be $f(x) = |x + 1|$ since the shift is in the positive direction. Explain why this is incorrect. Sample answer: Translations are written in the form $f(x) = |x - h| + k$, so $f(x) = |x + 1|$ would be $f(x) = |x - (-1)|$ which would be a horizontal shift to the left.

Common Error

Some students may write the equation using a plus sign instead of a minus sign. Remind them that once they determine how many units and in what direction the graph is translated, they need to *subtract* that number from *x*.

Example 5 Identify Absolute Value Functions from Graphs (Multiple Translations)

Questions for Mathematical Discourse

AL How do you know that this graph represents a function with more than one transformation? Sample answer: The vertex is not on an axis.

OL How many transformations are there, and what type are they? Sample answer: 2; a horizontal translation of 2 units to the left and a vertical translation of 5 units down

BL What are the coordinates of the vertex? (−2, −5)
How does identifying the coordinates help you solve the problem? Sample answer: I can use the *x*-coordinate for *h* and the *y*-coordinate for *k* in the equation $g(x) = |x - h| + k$.

Learn Dilations of Absolute Value Functions

Objective

Students will identify the effect on the graph of an absolute value function by replacing $f(x)$ with $af(x)$ or $f(ax)$.

Teaching the Mathematical Practices

7 Use Structure Students will learn how the structure of a function indicates how the graph of the function will be related to the graph of the parent function.

Interactive Presentation

Example 4, Identify Absolute Value Functions from Graphs

TAP

Students tap on the graph to see the parent function.

CHECK

Complete the Check exercise online to determine if students are ready to move on.

Lesson 4-7 • Absolute Value Functions 269

Online Professional Learning Support: Ready When You Are

Reveal Math features a digital library of self-paced professional learning videos and modules, including:

Program Implementation Support

The **Quick Start eLearning Module** explains program basics.

Plan, Teach, and Assess eLearning Modules provide deep-dives of the program instructional model and resources.

Digital Platform Support

The **Technical Support Resource Library** provides step-by-step instructions for the digital tools.

Mindset Matters

Reward Effort, Not Talent

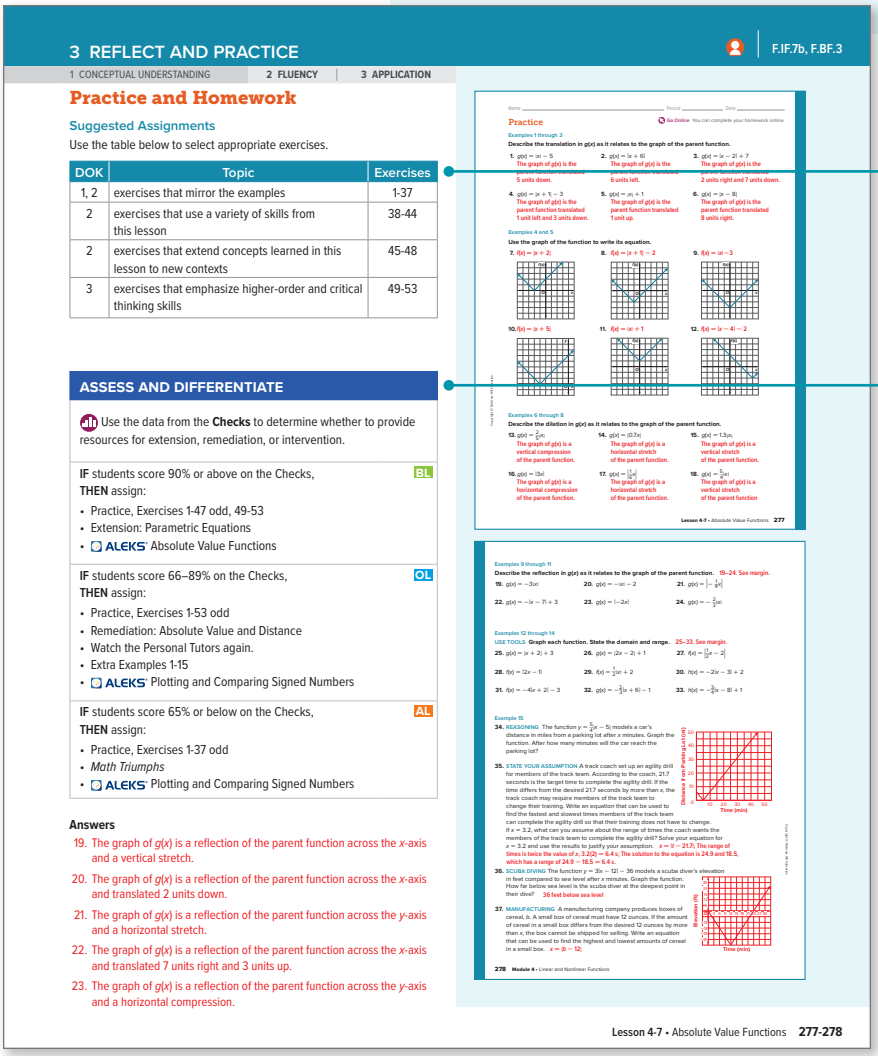
When adults praise students for their hard work toward a solution, rather than praising them for being smart or talented, it supports students' development of a growth mindset. Reward *actions* like hard work, determination, and perseverance instead of *traits* like inherent skill or talent.

How Can I Apply It?

Have students complete the Performance Task for the module. Allow students a forum to discuss their process or strategy that they used and give them positive feedback on their diligence in completing the task.

Fuel Growth by Encouraging a Positive Mindset

Mindset Matters tips at the beginning of each module provide strategies for encouraging a growth mindset and productive approaches to problem-solving.



3 REFLECT AND PRACTICE

F.IF.7b, F.BF.3

1 CONCEPTUAL UNDERSTANDING | 2 FLUENCY | 3 APPLICATION

Practice and Homework

Suggested Assignments

Use the table below to select appropriate exercises.

DOK	Topic	Exercises
1, 2	exercises that mirror the examples	1-37
2	exercises that use a variety of skills from this lesson	38-44
2	exercises that extend concepts learned in this lesson to new contexts	45-48
3	exercises that emphasize higher-order and critical thinking skills	49-53

ASSESS AND DIFFERENTIATE

Use the data from the **Checks** to determine whether to provide resources for extension, remediation, or intervention.

IF students score 90% or above on the Checks, **THEN** assign: BL

- Practice, Exercises 1-47 odd, 49-53
- Extension: Parametric Equations
- ALEKS Absolute Value Functions

IF students score 66–89% on the Checks, **THEN** assign: OL

- Practice, Exercises 1-53 odd
- Remediation: Absolute Value and Distance
- Watch the Personal Tutors again.
- Extra Examples 1-15
- ALEKS Plotting and Comparing Signed Numbers

IF students score 65% or below on the Checks, **THEN** assign: AL

- Practice, Exercises 1-37 odd
- *Math Triumphs*
- ALEKS Plotting and Comparing Signed Numbers

Answers

19. The graph of $g(x)$ is a reflection of the parent function across the x-axis and a vertical stretch.
20. The graph of $g(x)$ is a reflection of the parent function across the x-axis and translated 2 units down.
21. The graph of $g(x)$ is a reflection of the parent function across the y-axis and a horizontal stretch.
22. The graph of $g(x)$ is a reflection of the parent function across the x-axis and translated 7 units right and 3 units up.
23. The graph of $g(x)$ is a reflection of the parent function across the y-axis and a horizontal compression.

Lesson 4-7 • Absolute Value Functions 277-278

Address Student Needs Based on Their Depth of Knowledge (DOK)

DOK charts in the Teacher Edition recommend which exercises to assign to students based on their needs.

Provide In-the-Moment Differentiation

An **Assess and Differentiate** feature at the end of each lesson provides suggestions to reach every learner.

Ongoing Pedagogy Support

- **Classroom Videos** model lessons from a real classroom.
- **Math Misconception Videos** address common misconceptions and strategies to help students overcome them.
- **Content and Pedagogy Videos** provide tips for teaching difficult math concepts.
- **Interviews with Experts** examine the "why" behind the math and best practices.
- **Content Progression Resources** show the progression of math concepts from elementary through high school math.

Reveal Math Meets You Where You Are and Goes Where You're Growing

Lesson Model

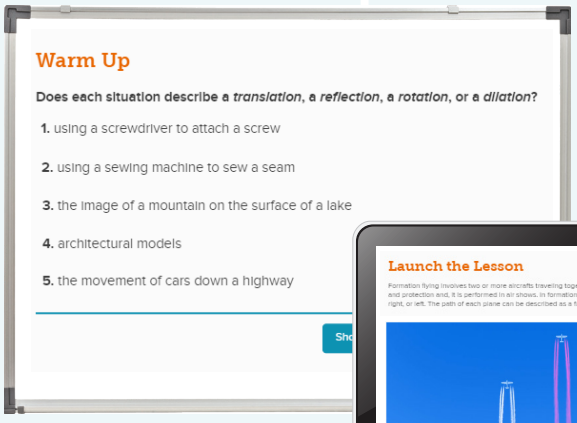
Launch

WARM UP

The **Warm Up** covers the prerequisite skills needed for the lesson.

Teachers can also project the "**What Vocabulary Will You Learn?**" and "**Today's Standards**" slides to review what topics will be covered in the lesson with their class.

Warm Up

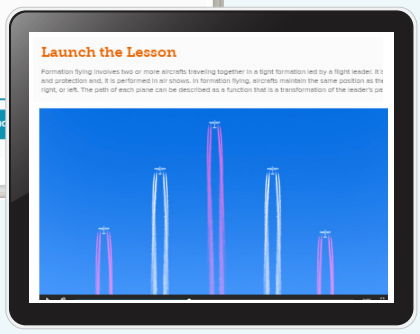


LAUNCH THE LESSON

In **Launch the Lesson,** teachers utilize a hook to engage students and pique their interest.

Talk About It! prompts initiate student thinking about the lesson content.

Launch the Lesson



INDIVIDUAL ACTIVITY

GROUP ACTIVITY

CLASS ACTIVITY

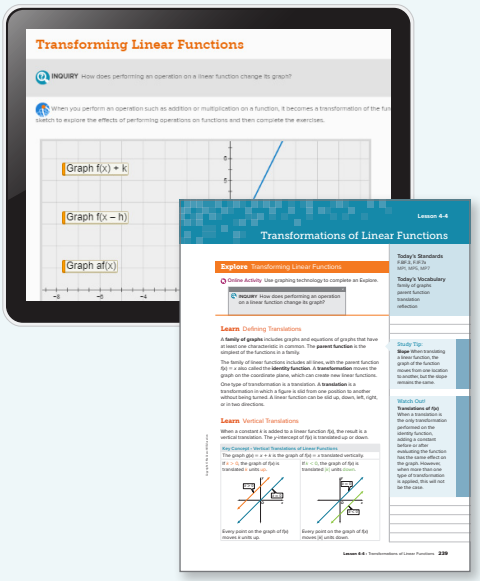
Explore and Develop

EXPLORE

Students complete rich tasks in online **Explore** activities while working in collaborative groups, allowing them to share ideas and approaches with their peers.

Study Tips and **Watch Out!** tips in the print Interactive Student Edition help focus student attention.

Explore



Teachers can project the digital features, or students can access them on their own devices.

The abundant print and digital resources within *Reveal Math* intersect in a meaningful way to heighten the learning experience. Interactive print and digital tools increase student engagement while simultaneously deepening comprehension. The *Reveal Math* classroom is an active classroom experience that brings math to life!

Reflect and Practice

LEARN

In the **Learn** portion of the lesson, students' understanding is formalized through guided instruction.

Teachers can use the aligned print and digital content to create the most effective instructional pathway for their students.

EXAMPLES & CHECK

Students work through one or more **Examples** tied to the key concepts, followed by a quick **Check** (formative assessment) to measure their understanding.

Examples and **Checks** can be completed in the print **Interactive Student Edition** or online. When **Checks** are completed online, performance data is instantly captured for the teacher.

EXIT TICKET

The **Exit Ticket** provides a quick formative assessment opportunity that encourages students to reflect on their learning.

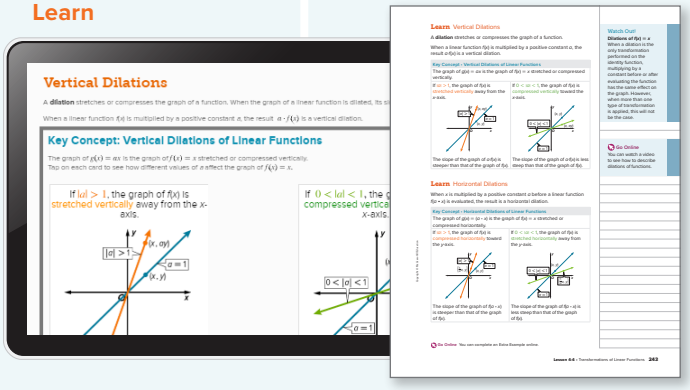
Write About It! prompts provide an opportunity for students to integrate writing skills in the math classroom.

PRACTICE

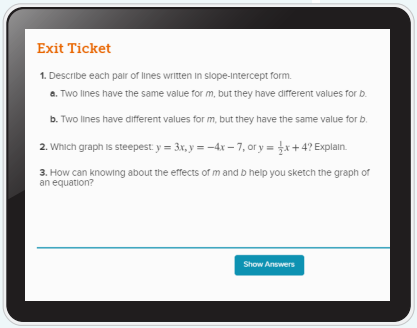
Students complete the **Practice** either online or in their print **Interactive Student Edition** to apply what they've learned and build procedural fluency.

When the **Practice** is completed online, performance data is instantly captured for the teacher.

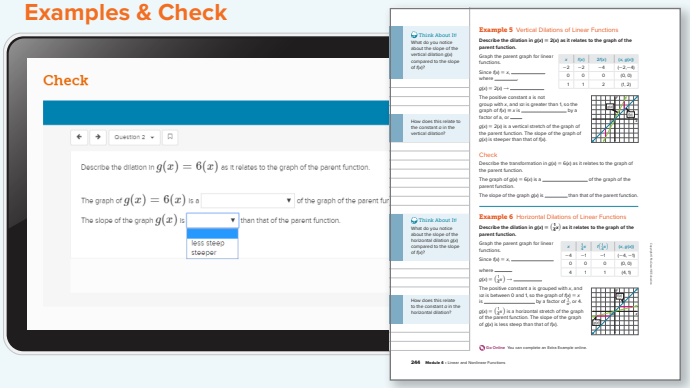
Learn



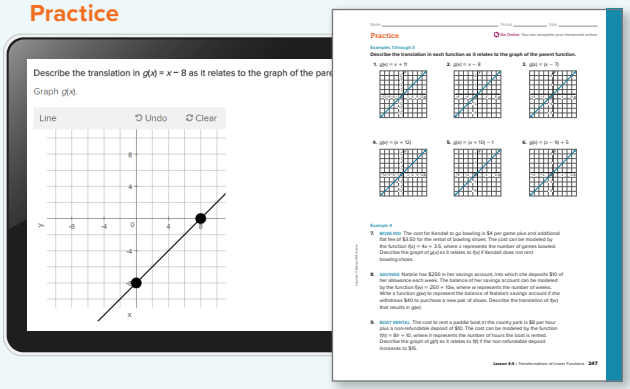
Exit Ticket



Examples & Check

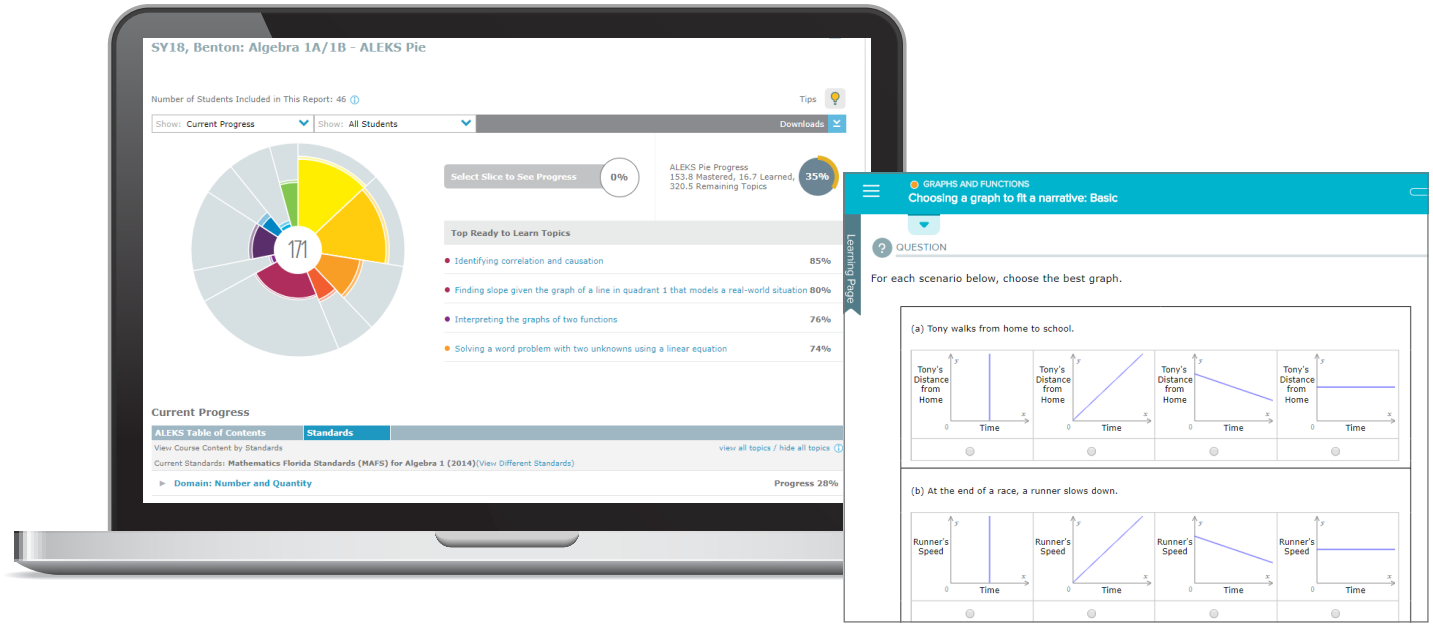


Practice



Support Every Student

Reveal Math empowers teachers with the tools they need to provide in-the-moment differentiation and deliver insightful instruction that reaches every learner.



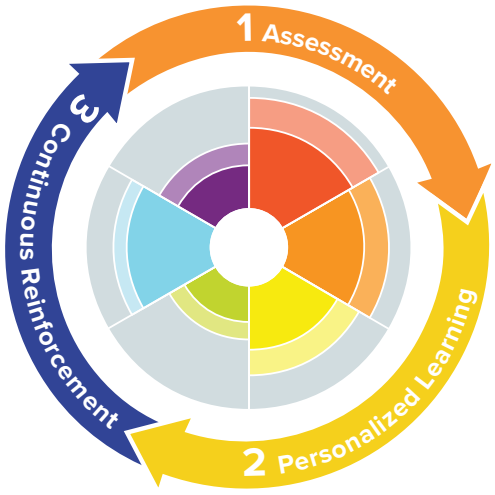
ALEKS®

Reveal the Power of Personalized Learning

ALEKS® is an online math solution for Grades 6–12 that uses adaptive technology to identify and provide instruction on the topics each student is most ready to learn. Through a continuous cycle of assessment, learning, and reinforcement, *ALEKS* develops a personalized learning path for each student to ensure measurable success.

Benefits of Using *ALEKS*:

- Provide standards-based instruction
- Focus on appropriate topics to prevent boredom or frustration
- Offer bilingual courses in English and Spanish
- Easily differentiate with remediation, on-level, and enrichment opportunities
- Pie reports allow you to see which students know the concepts in each module's topic and adjust instruction as appropriate
- Access dynamic data at the student, class, school, and district level to inform classroom instruction



Build Language Skills in the Math Classroom

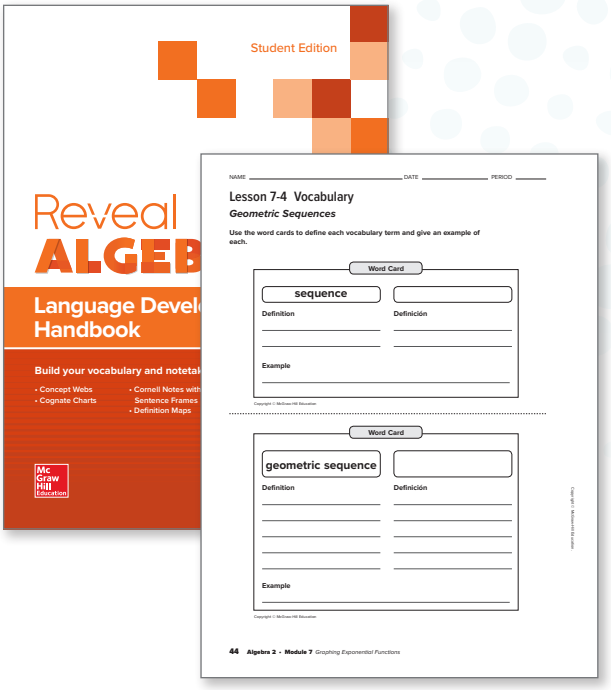
The **Language Development Handbooks** empower teachers to meet the language needs of all learners.

The **Language Development Handbook Student Edition** includes:

- Word Cards.
- Vocabulary Squares.
- Three-Column Charts (with English/Spanish cognates).
- Definition Maps.
- Concept Webs.
- Cornell Notes.

The **Language Development Handbook Teacher Edition** includes:

- English Learner Instructional Strategies.
- English Language Development Leveled Activities.
- Multicultural Teacher Tips.



Resources for Spanish Speakers

- Spanish Interactive Student Edition for Algebra 1, Geometry, and Algebra 2
- Language Development Handbook for Algebra 1, Geometry, and Algebra 2 *(Teacher and Student Editions)*
- Spanish Personal Tutors
- Multilingual eGlossary
- *ALEKS* Bilingual Courses in Spanish

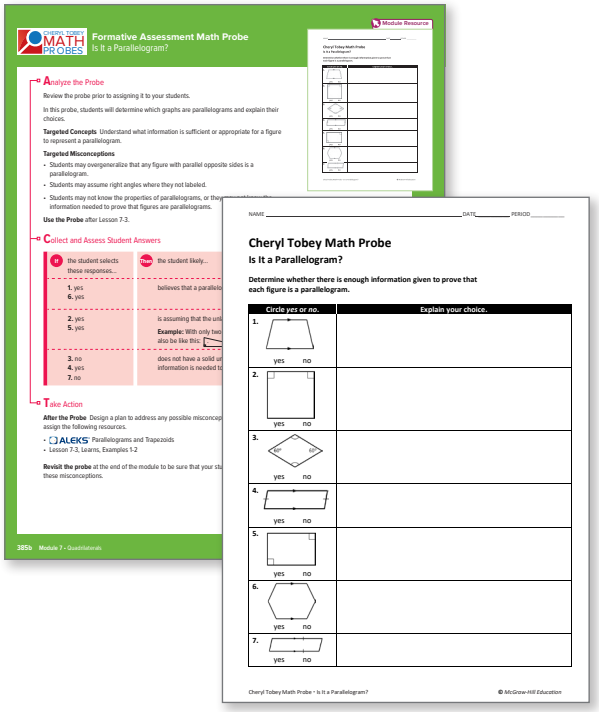
Assessment

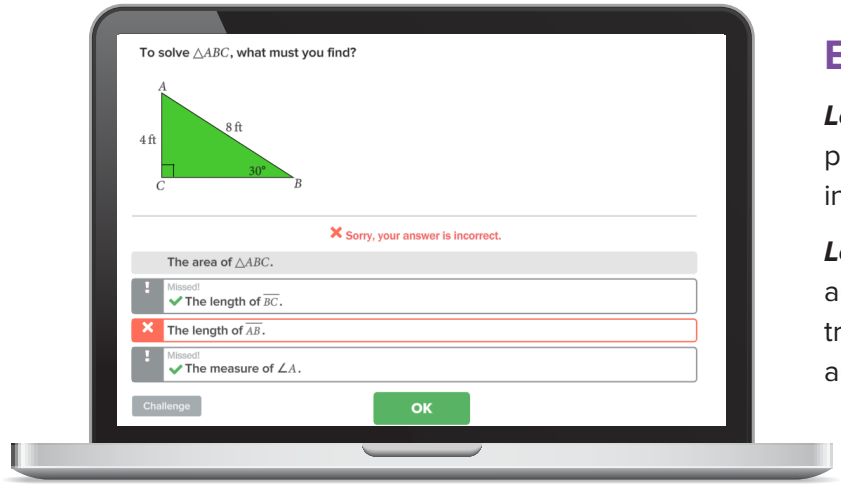
With *Reveal Math,* students apply their deep, authentic learning to a variety of assessments in order to demonstrate that they can explain both the *what* and the *why* of mathematics—not just the *how*.

Teach Students that Mistakes are an Opportunity for Growth

Each module features a **Cheryl Tobey Formative Assessment Math Probe**—exclusive to McGraw-Hill Education!

Students complete an activity that is designed to target common misconceptions about a particular mathematical concept. Teacher resources include support for diagnosing and correcting these misconceptions.

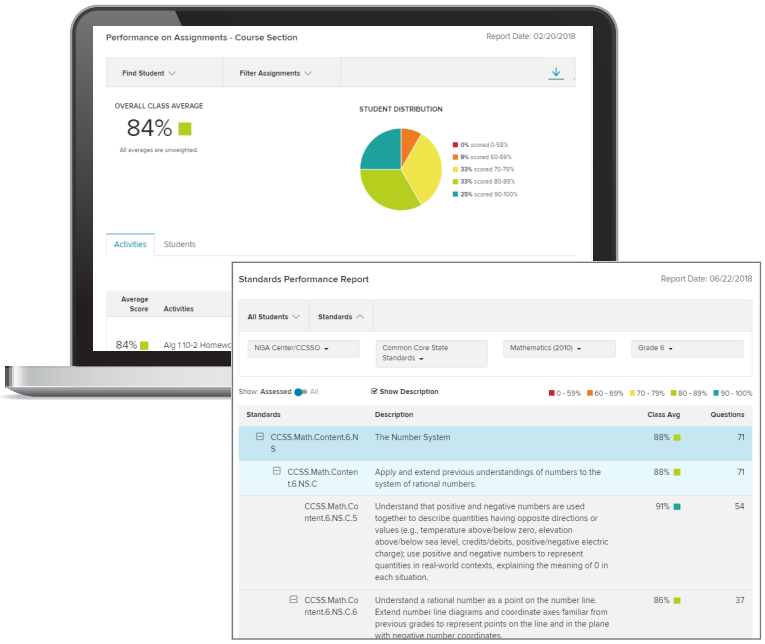




Ensure Topic Mastery

LearnSmart®, included with *Reveal Math,* provides students with access to an online, interactive study tool.

LearnSmart assesses a student's proficiency and knowledge within a specific course, tracks which topics have been mastered, and identifies areas that need more study.



Drive Instruction with Actionable Data

By drawing on performance data from student assessments and activities, the *Reveal Math* reports and recommendations provide teachers and administrators with the information they need to monitor and adjust instruction on a daily basis.

Activity Report

- Overall class or student average score
- Overall class or student progress over time
- Performance by activity type (e.g., homework, quiz, exam)
- Average score per activity

Standards Report

Class and individual average score per standard, skill, or objective.

Recommendations Report

Suggested resources that can be assigned to any student in that group based on their performance.

Administrator Report

Activity, standards, progress, and usage reports.

Assessment Options

Diagnostic Assessment

- Diagnostic and Placement Test, with Scoring Guide
- Module Pretests

Formative Assessment

- Cheryl Tobey Formative Assessment Math Probes
- Checks
- Exit Tickets
- Put It All Together

Summative Assessment

- Leveled Module Tests
- Module Review
- Module Vocabulary Tests
- End of Course Test
- Performance Tasks
- *LearnSmart*

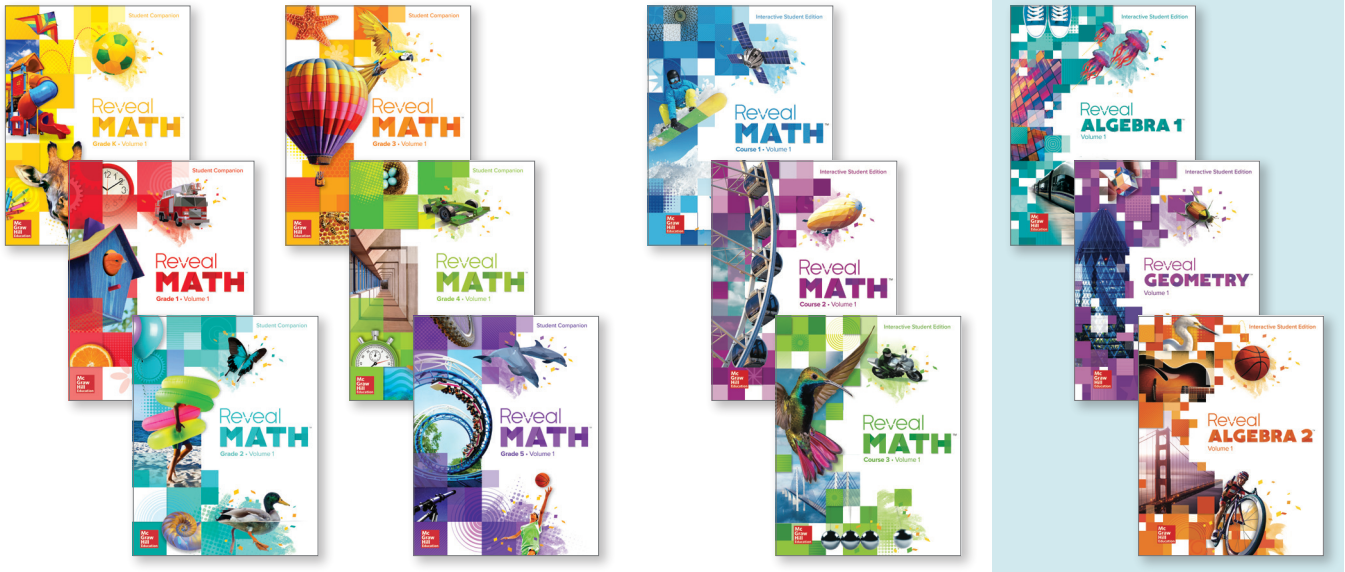
PLUS—Build your own assessments with access to question banks featuring technology-enhanced items.

The K–12 Solution for Today's Mathematics Classroom

Reveal Math is a coherent, vertically aligned K–12 core math solution that empowers educators to uncover the mathematician in every student through powerful explorations, rich mathematical discourse, and timely individualized learning opportunities.

COMING SOON!

K–5	6–8	9–12



Learn more about *Reveal Math*

Visit **revealmath.com/9-12** to sample online and access a trial of the digital resources, or contact your sales representative at **mheducation.com/contact** to request a presentation.

Mc Graw Hill

SB.1024331

MEMORANDUM

TO: NWABSD Board of Education Members

DATE: February 29, 2024

NUMBER:

FR: Office of the Superintendent

SUBJECT: Approval of Job Descriptions-
Classroom Interventionist & Iñupiaq Language Instructor

STRATEGIC PLAN/BOARD GOAL:
NWABSD Strategic Goal 2: Instructional Supports

ABSTRACT:

Each month various Human Resources actions occur which require Board action or cognizance.

ISSUE:

At issue is the approval of Human Resources actions.

BACKGROUND AND/OR PERTINENT INFORMATION:

On a monthly basis the administration recommends Board approval of new certified/classified hires, position reclassifications, and new or revised job descriptions. In addition, the administration informs the Board of resignations, transfers, and terminations throughout the district.

The Human Resources action item for Board approval of the job description for Iñupiaq Language Instructor and Classroom Interventionist.

ALTERNATIVES:

1. Approve the Human Resources actions as presented.
2. Disapprove the Human Resources actions as presented.
3. Take no final action.

ADMINISTRATION'S RECOMMENDATION:

The administration recommends the Board approve the Human Resources actions as presented.

NORTHWEST ARCTIC BOROUGH SCHOOL DISTRICT

HUMAN RESOURCES DEPARTMENT

P.O. BOX 51 • KOTZEBUE, AK 99752 • (907) 442-3472 x242 • FAX (907) 442-2172

JOB DESCRIPTION

TITLE: Classroom Interventionist FSLA STATUS: Non-Exempt

QUALIFICATIONS:

1. High School Diploma or GED.
2. AA degree or higher, forty-eight (48) semester credits of college level coursework, OR successful completion of the requires assessments (HELP, ParaPro Assessment, etc.) The minimum qualifications for this position set forth in Every Student Succeed Act (ESSA)
3. Ability to learn with a minimum of assistance.

REPORTS TO: Principal and Classroom Teacher

JOB GOAL: Collaborate closely with student, classroom teachers, and site instructional staff on a regular basis to provide educational support ensuring alignment with District's educational programs and fidelity to adopted curricular materials to promote student engagement and success.

PERFORMANCE RESPONSIBILITIES:

1. Complete all District mandatory and required trainings for the position.
2. Supervise students to maintain a safe and productive environment.
3. Foster a supportive and inclusive learning environment that encourages student participation and cooperation.
4. Collaborate with the classroom teacher to support or adjust lesson plans focused on instructional goals.
5. Assist with administering assessments to track student progress, under the direction of the teacher.
6. Maintain accurate records of student attendance.
7. Collaborate effectively with the teacher and other staff to address students' individual needs and support their academic success.
8. Support the integration of technology and multimedia resources into classroom instruction.
9. Maintain confidentiality regarding student information, ensuring compliance with the Family Educational Rights and Privacy Act (FERPA).
10. Participate in relevant in-service training programs to enhance skills and knowledge related to supporting instruction.
11. Understanding and applying professional standards of conduct, ethical behavior, and continuous improvement.
12. Providing opportunities that support students' intellectual, social, and personal development.
13. Applying effective instructional elements to support teaching and learning activities.
14. Motivating and assisting students to build self-esteem, develop interpersonal skills, and strengthen abilities for success.
15. Understanding roles and responsibilities in assessment, diagnosis, and evaluation.
16. Adhering to communication protocols with colleagues, community members, and parents.
17. Implementing district guidelines for student and staff safety, health, and wellbeing.
18. Utilizing technology to assist and enhance teaching and learning.
19. Fulfill any other duties assigned by the principal or designee to contribute to the success of the educational program.

Please note this job description is not intended to cover or contain all activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time or notice.

TERMS OF EMPLOYMENT: Salary and work year to be established by the NWABSD Board of Education.

EVALUATION: Performance of this job will be evaluated in accordance with the provisions of the Board Policy.

AN AFFIRMATIVE ACTION-EQUAL OPPORTUNITY EMPLOYER.
APPLICATIONS FROM MINORITIES ARE ENCOURAGED.

Revised 02/29/2024

NORTHWEST ARCTIC BOROUGH SCHOOL DISTRICT

HUMAN RESOURCES DEPARTMENT

P.O. BOX 51 • KOTZEBUE, AK 99752 • (907) 442-3472 x242 • FAX (907) 442-2172

JOB DESCRIPTION

TITLE: Iñupiaq Instructor FSLA STATUS: Non-Exempt

QUALIFICATIONS:

1. High School Diploma or GED.

REPORTS TO: Principal

JOB GOAL: To facilitate the acquisition of language skills among students, create a positive and engaging learning environment, develop lesson plans, implement effective teaching strategies, and foster communication, cultural understanding, and language fluency.

PERFORMANCE RESPONSIBILITIES:

1. Develops lesson plans for delivery of Inupiaq Language instruction to students.
2. Integrates cultural activities into language instruction to enhance students' understanding and appreciation of the language.
3. Devises special strategies for reinforcing material or skill based on a sympathetic understanding of individual students, their needs, interests, and abilities.
4. Operates and cares for equipment used in the classroom for instructional purposes.
5. Helps students master equipment or instructional materials.
6. Distributes and collects workbooks, papers, and other materials for instruction.
7. Guides independent study, enrichment work and remedial work.
8. Supervises students at all times while students are assigned to Iñupiaq class.
9. Delivers engaging and interactive language lessons using a variety of teaching methods and materials.
10. Fosters a supportive and inclusive learning environment that encourages student participation and collaboration.
11. Administers assessments to measure student progress and analyze results to identify areas for intervention.
12. Checks and records student attendance.
13. Collaborates with parents, other teachers, supervisor, and other staff to address student needs.
14. Utilizes technology and multimedia resources throughout classroom lessons.
15. Maintains high level of ethical behavior and confidentiality of information about students.
16. Participates in in-service training programs, as assigned.
17. Other duties as assigned by your supervisors.

Please note this job description is not intended to cover or contain all activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time or notice.

TERMS OF EMPLOYMENT: 7.0 hours per day, 190 days per school year
Range 1 / Step 1, $226.71 per day

EVALUATION: Performance of this job will be evaluated in accordance with the provisions of the Board Policy.

AN AFFIRMATIVE ACTION-EQUAL OPPORTUNITY EMPLOYER APPLICATIONS FROM MINORITIES ARE ENCOURAGED