



Math 180[®]

Intervention and Special Education

Empowering Students' Algebra Readiness
by Building Strong Foundations

Grades 5–12





"My students are **dreaming** again, and they **are doing things** that so many people have told them they can't do."

Sholanda Smith

7th Grade *Math 180* Teacher
Dysart USD

How *Math 180* makes a positive impact with **Special Education**

Math 180 is an individualized, evidence-based program that offers a comprehensive solution for special education teachers and students. It provides foundational math skills, aligns with Universal Design for Learning (UDL) principles through collaboration with the Center for Applied Special Technology (CAST), and offers professional knowledge and resources for teachers, families, and leaders. Additionally, the Student Application offers adaptive technology and personalized instruction to promote positive results and support for students. *Math 180* integrates universal screenings, placement, grouping, and progress monitoring to facilitate a Multi-Tiered System of Support (MTSS) approach.

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Research-Based Principles Backed with Evidence

In the 2020–2021 academic year, approximately 7.2 million students (15% of the student population) qualified for special education services under the Individuals with Disabilities Education Act (IDEA). Among them, 33% were identified as students with specific learning disabilities that adversely affect learning and require specifically designed instruction.

According to the National Center for Education Statistics¹, a specific learning disability refers to a disorder in one or more psychological processes related to language comprehension and use, impacting skills such as listening, thinking, speaking, reading, writing, spelling, and math calculations.

Math 180's transformative program follows **three research-based principles**: fostering a growth mindset, utilizing a multisensory approach, and focusing on what matters most. It provides teachers with tools to accelerate students with specific learning disabilities to grade-level proficiency while instilling confidence in their ability to succeed.

Two research studies confirm the effectiveness of *Math 180* for students with disabilities. Results showed significant growth within a year compared to non-enrolled students, and students using only the Student Application for 15–20 minutes three times a week **experienced 1.5 times the expected yearly growth**.

¹National Center for Education Statistics. (2022). Students With Disabilities. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved 1.23.2023, from <https://nces.ed.gov/programs/coe/indicator/cgg>.

Special Education by the Numbers

7.2

Million Special
Education Students

33%

Identified with a Specific
Learning Disability

Math 180 Improves Outcomes

20%

Quantile Measure Increase
for Students with Disabilities

1.5x

Growth via Digital Access



"It's like having **fun**
and **learning** at the
same time!"

7th Grade Math 180 Student
Northern California District
Special Education

Successful Engagement with a Multi-Tiered System

Math 180 resources are designed to deliver focused instruction that effectively balances whole-group and small-group settings, while incorporating Positive Behavioral Interventions and Supports (PBIS).

This comprehensive approach enhances engagement, fosters positive behaviors, personalizes benchmarks, monitors student progress, and instills motivation for success. These elements are seamlessly integrated across the entire program, ensuring a cohesive and effective learning experience.

Multi-Tiered System of Support



Academic (RTI)

Whole-Group & Small-Group Learning

- **Whole-Group** learning provides macro-level skills that all students need, using developmentally and academically appropriate content.
- **Small-Group** learning addresses students' individual academic needs by providing targeted instruction based on assessment data.

Student Application

- **Adaptive instruction** individually targets students' academic needs.
- Recursive practice through **spaced repetition** ensures that students have moved new skills into long-term memory.



Behavioral (PBIS)

Whole-Group & Small-Group Learning

- **Instructional routines** encourage students to engage in the material with scaffolds that structure and support their responses. The instructional routines help create a learning environment in which students can actively participate in a nonthreatening, flexible way.
- Lessons follow a consistent **gradual release** and **guided practice** approach, creating a dependable learning environment that allows students to thrive.

Student Application

- **Immediate motivational feedback** as students answer questions promotes engagement and focus.
- Students have visibility into their own learning progress, allowing them to **set and track learning goals**.
- The Student Application provides **patient, recursive instruction**, allowing students to learn at a pace comfortable for them.

The program includes assessments that are crucial for success by identifying areas where instruction is most needed for students. *Math 180* offers a range of assessments to ensure that each student receives personalized support and experiences meaningful growth in their mathematical abilities.



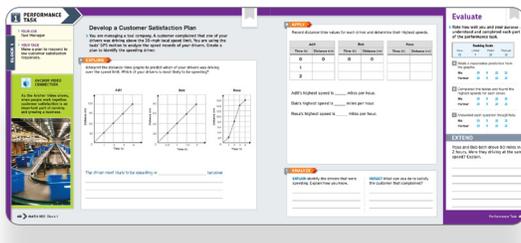
➤ Screening & Placement Recommendations

Customers can use *NWEA® MAP® Growth™* - included with the *Math 180* subscription - to automatically place students' directly into the appropriate portion of the *Math 180* student application and as beginning-of-year, middle-of-year, and end-of-year benchmarking.



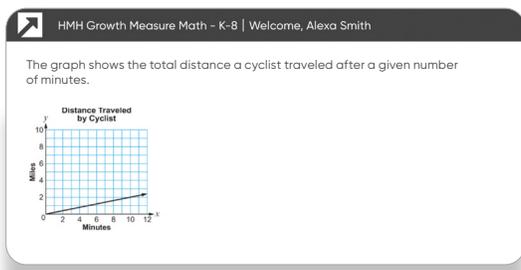
➤ Formative Assessment & Progress Monitoring

Monitor student learning and provide ongoing feedback with the Learn Zone, Success Zone Quizzes, Brain Arcade, and mSpace Exit Tickets. Each one provides a plethora of information to help teachers utilize student performance data to differentiate learning during teacher-facilitated instruction.



➤ Interim Assessment & Progress Monitoring

Monitor student academic and behavioral growth throughout the school year with the *Math 180* Success Zone quizzes, mSpace Performance Tasks, and mSkills Assessment.



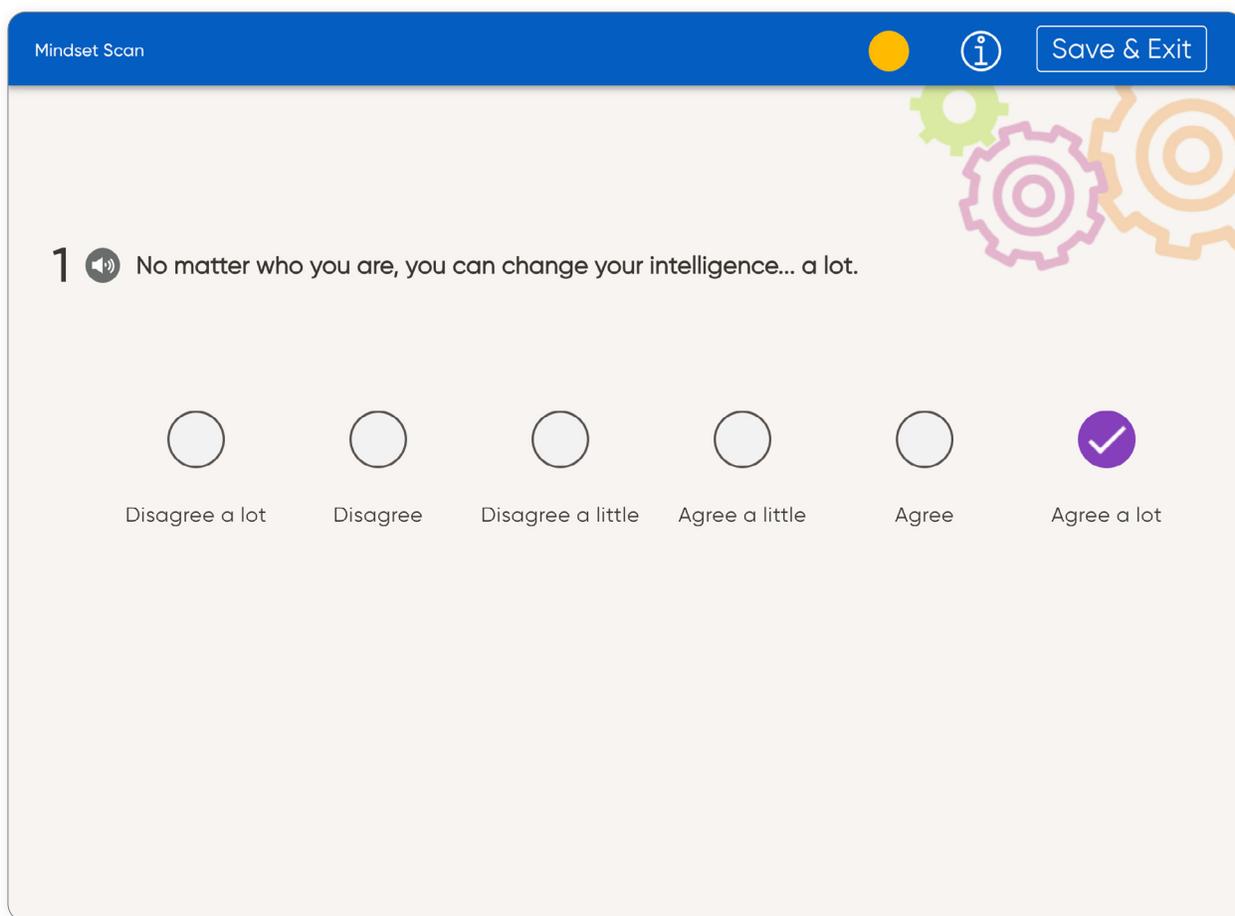
➤ Summative Assessment

Math 180's summative assessment tracks overall math progress toward algebra, college, and career readiness.

Why Changing Students' Growth Mindset Matters

Too often students believe that they cannot succeed in math if it does not come naturally. Research shows students who believe they can grow their math skills engage more in class and get better math grades. The best way for students to begin their growth mindset transformation is to identify where they may have fixed mindset tendencies.

Math 180 instills groundbreaking motivational techniques to build students' growth mindset. Teachers can easily assign individual students or the whole class the Growth Mindset Scan.



The screenshot shows a digital interface for a 'Mindset Scan'. At the top, there is a blue header bar with the text 'Mindset Scan' on the left, a yellow circle icon, an information icon, and a 'Save & Exit' button. Below the header, the main content area has a light beige background with a decorative graphic of three interlocking gears (green, purple, and orange) in the upper right corner. A question is displayed: '1 [speaker icon] No matter who you are, you can change your intelligence... a lot.' Below the question, there are six radio button options arranged horizontally: 'Disagree a lot', 'Disagree', 'Disagree a little', 'Agree a little', 'Agree', and 'Agree a lot'. The 'Agree a lot' option is selected, indicated by a purple checkmark inside its radio button.




Math 180™


Habits of a Growth Mindset

<p>Effort Math has purpose and effort leads to success.</p> 	<p>Belief I believe change is possible.</p> 	<p>Grit Hard work leads to success.</p> 
<p>Taking Risks Failure isn't the end of the world; it's an opportunity to learn.</p> 	<p>Perseverance I won't give up. Despite mistakes, I keep looking for a successful solution.</p> 	<p>Embracing Criticism Constructive criticism can help me make a big leap.</p> 
<p>Problem Solving I try different ways to find a solution.</p> 	<p>Seeking Challenges I want to take risks and try things that seem difficult.</p> 	<p>Resilience I pick myself up from failure and tackle the next challenge.</p> 

Additional resources, such as posters to encourage the habit of Growth Mindset, can be displayed in the classroom. Printable and personalizable certificates are available to display the students' progress during conferences or sent home as progress indicators.

High-Leverage Practices + High-Quality Resources

By implementing High-Leverage Practices (HLP), *Math 180* supports special education teachers and enhances student outcomes. HLPs empower teachers with a framework for guiding assessments, fostering collaboration, and delivering instruction in a positive learning environment that addresses social-emotional and behavioral practices.

In each of these areas, *Math 180* offers valuable support, including an adaptive placement tool for appropriate student positioning, scaffolded instruction with practice and re-teaching opportunities, and progress monitoring through in-program assessments. Additionally, *Math 180* provides an engaging student experience that fosters motivation and continuous growth.

The screenshot displays two pages from the Math 180 software. The left page, titled 'Divide by Taking Out Equal Groups (continued)', shows 'STEP 1: Represent the Problem With an Array.' and 'STEP 2: Use the Array Model to Divide.' The right page, titled 'EQUAL GROUPS IN DIVISION', shows 'Solve Problems in Pairs' and includes a 'HIGH-LEVERAGE PRACTICES' section. Below the screenshot, a red-bordered box highlights the 'HIGH-LEVERAGE PRACTICES' section.

HIGH-LEVERAGE PRACTICES

<p>Respond to Common Patterns of Thinking</p> <p>IF students do not arrange tiles correctly in the array model, THEN display an array of 5 rows and 4 tiles in a row. Help students relate the model to division.</p> <ul style="list-style-type: none"> ■ How many tiles are there? ■ How does the arrangement of the tiles show 20 divided by 4? 	<p>Elicit Student Thinking</p> <p>Discuss real-life situations in which people use division.</p> <ul style="list-style-type: none"> ■ When might someone want to separate a sum of money, such as \$1 or \$10, into equal groups? ■ What other things do people divide? Think about food, gifts, and household chores. ■ When have you used division? 	<p>Modify Tasks</p> <p>IF students use the array model accurately to model division, THEN have them try the area model to solve division problems.</p> <ul style="list-style-type: none"> ■ How are the array model and area model alike? How are they different? ■ How are multiplication and division related?
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➤ Game Boxes include valuable tools for supporting students' learning needs. *Math 180's* classroom games provide engaging, low-pressure, adaptable activities that can help build confidence and reinforce math skills and concepts.

Hands-on Manipulatives

In order to support special education students, *Math 180* offers a variety of top-notch resources tailored to meet each individual's unique needs. This includes hands-on manipulatives like the *Math 180* Game Boxes, which offer an interactive and enjoyable way to practice math skills and concepts. These resources, along with others found in the Teacher Edition, link abstract ideas and real-life experiences. They help students stay engaged, comprehend concepts, and succeed in the math classroom. Whether used in core or dedicated classrooms, *Math 180's* high-quality resources guarantee that every student will have an equal opportunity to excel.

Making Math Memorable with **Multisensory Instruction**

Math 180 makes it easy to implement Universal Design for Learning (UDL) in the classroom. The software and printed materials are designed to cater to learner variables while providing all students with equal opportunities to grow by representation, action, expression, and engagement.

Multiple Means of Representation

Math 180's multisensory approach includes interactive software with digital mTools providing audio and visual support. For example, manipulatives and teacher-led instruction offer additional opportunities to use visual, auditory, kinesthetic, and tactile modalities to help students understand and retain mathematics.

EXPLORE ZONE SIMULATION Design an Aquarium Exhibit Student Software Menu

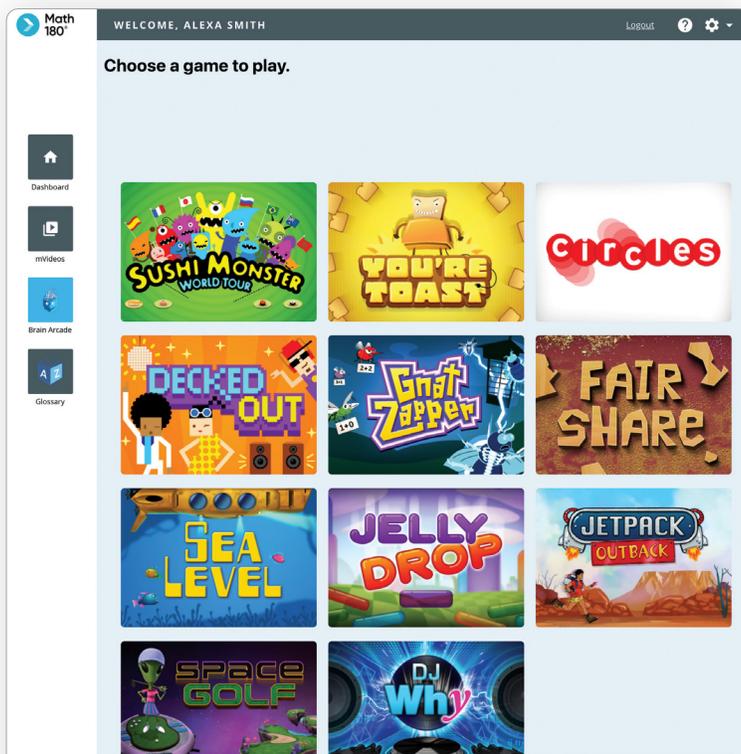
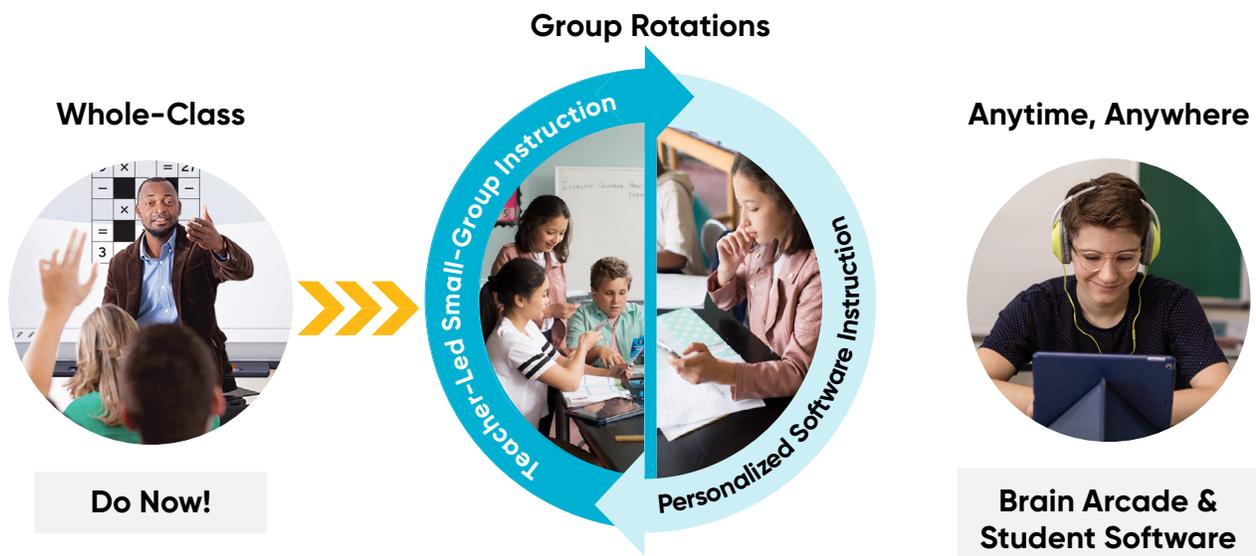
Introduction Overview Surface Reef Floor Review Results

Welcome to the simulation, where you get to make all the choices and final decisions. We want you to explore and learn as you go and see how your choices influence the math. Be creative, because there are no “right” or “wrong” answers. Happy learning!

When you are ready, click the GO ON button to begin the simulation.

Multiple Means of Action and Expression

During teacher-led lessons, students have opportunities to express themselves in one-on-one, small-group, and whole-group settings. In the software, students can practice and demonstrate mathematical skills using interactive digital tools such as virtual manipulatives and simulations.



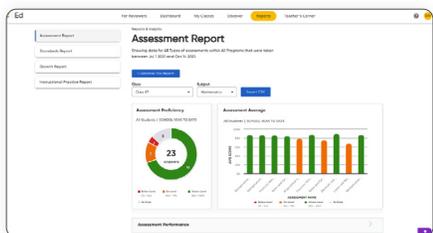
Multiple Means of Engagement

Small-group, whole-group, and independent activities provide a variety of settings for students to engage with the curriculum. *Math 180* software activities encourage gamification, personalization, real-world connections, and multimodal instruction to differentiate instruction to meet students' varied needs.

Supportive IEP-Driven Progress Monitoring

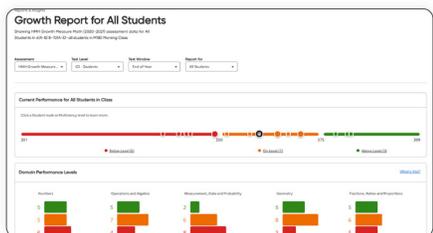
At HMH we understand that data helps to identify if students' needs and goals are being met. It provides guidance on creating targeted interventions or accommodations so students can achieve success and set additional goals as well as track their progress over time.

The suite of reports within *Math 180* provides valuable tools for educators to craft Individualized Education Plan (IEP) goals and measure the progress of each student's strengths, weaknesses, and learning goals by providing actionable data based on student performance.



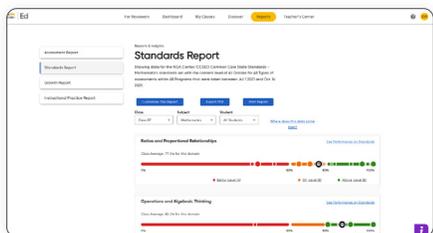
➤ Assessment Report

Provides overall class and individual student performance on in-program assessments. The Item Analysis helps teachers identify the concepts students understand and where students still need help.



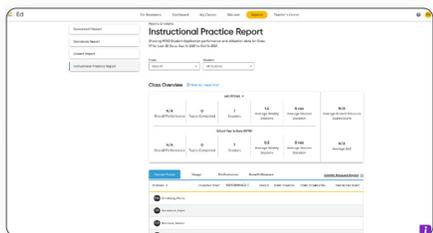
➤ Growth Report

Provides insights on content recommendations. Teachers can see an at-a-glance view of student and/or class performance and monitor their growth throughout the school year.



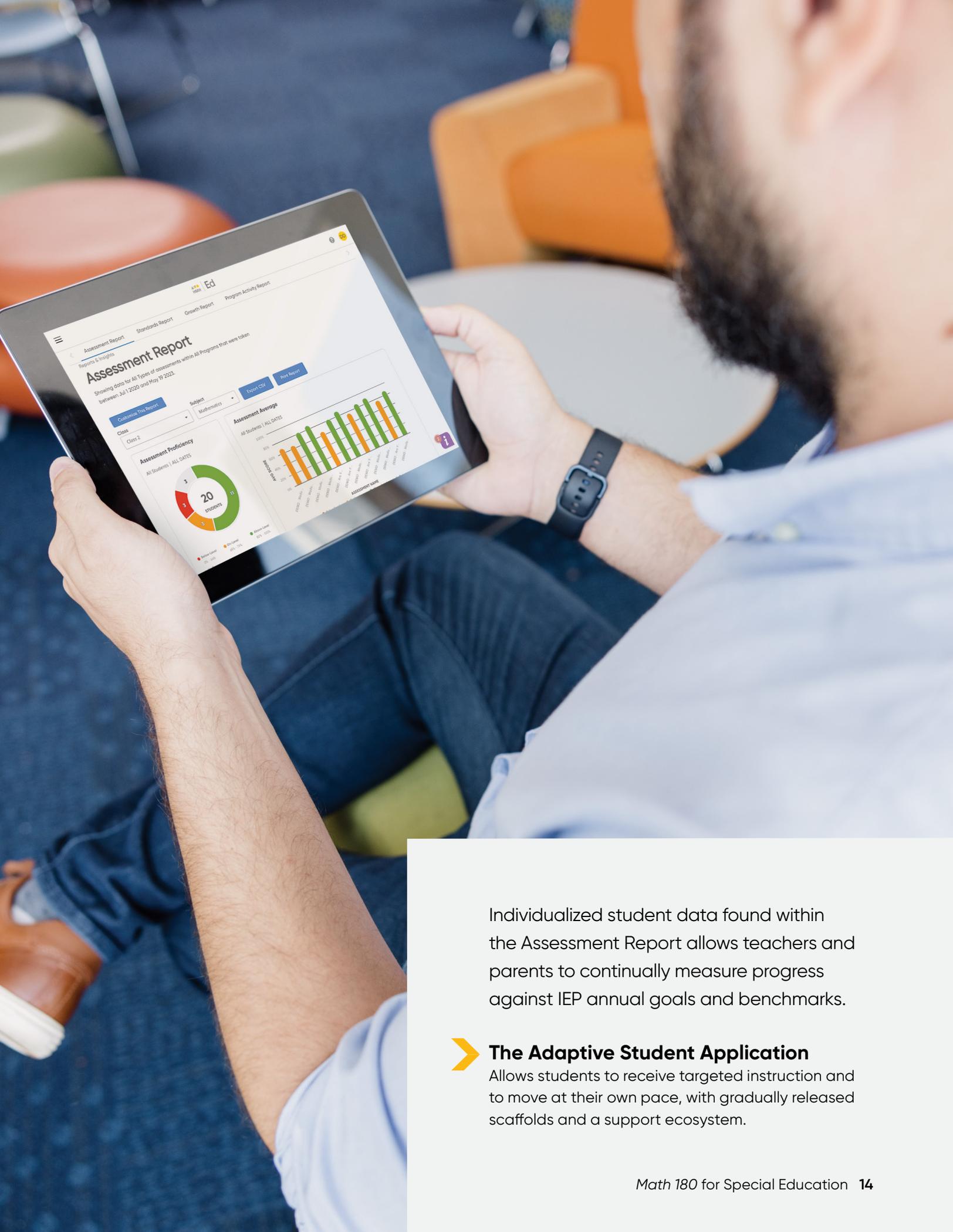
➤ Standards Report

Displays students' average scores for each domain in the selected standard set. Teachers can use this report to see students' proficiency on individual standards and domains as well as to create groups for small-group support.



➤ Program Activity Report

Details student performance and usage metrics in the Student Application. Teachers can use this report to identify students who need additional support or are ready for a stretch to grade-level content.



Individualized student data found within the Assessment Report allows teachers and parents to continually measure progress against IEP annual goals and benchmarks.

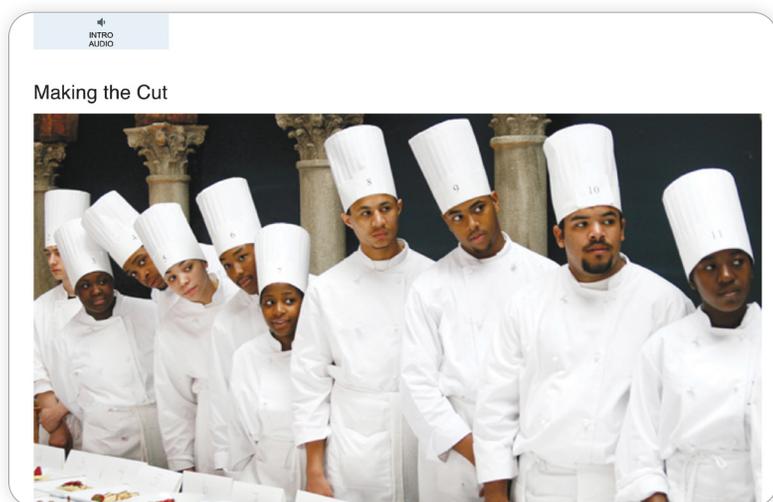


The Adaptive Student Application

Allows students to receive targeted instruction and to move at their own pace, with gradually released scaffolds and a support ecosystem.

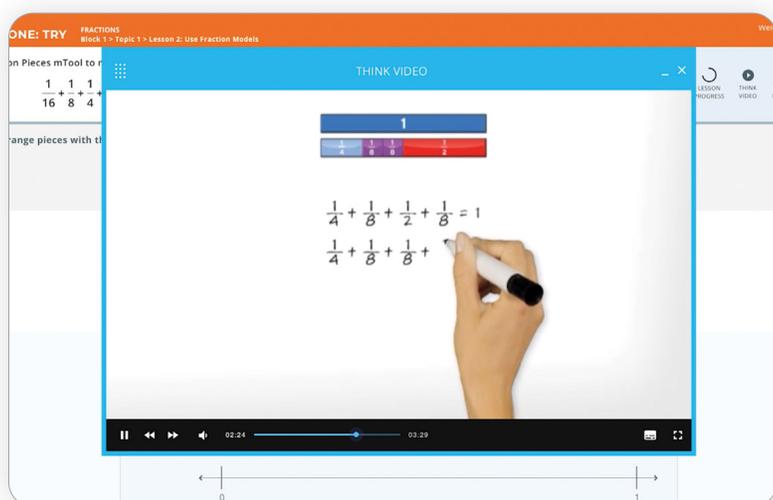
Appropriate and Adaptive Technology

The *Math 180* Student Application applies the principles of UDL to include multiple pathways to acquire content, express learning, and engage students. Meanwhile, teachers receive multiple forms of support for students with disabilities. The Individualized Educational Program's adaptive resources include tools for creating individualized learning plans, allowing for social-emotional learning, and positive growth mindset behaviors deployed by proficient mathematics.



➤ Explore Zone

Students start each block in the Explore Zone with high-interest concepts that fuel their aspirations and engage them in the math ahead.



➤ Learn Zone

In the Learn Zone, students master key concepts and progress along the path to algebra with direct instruction and adaptive practice.

FAST TRACK FRACTIONS
Block 1 • Topic 1 • Lesson 2: Use Models to Compare Fractions

Ted wants to ship a gift box by US mail. It weighs $\frac{7}{8}$ of a pound. Any package that weighs more than 13 ounces ($\frac{13}{16}$ of a pound) must be brought to the post office in person. Does Ted need to bring his gift box to the post office?

Step 1: Build a row with length $\frac{7}{8}$. Then build a row with length $\frac{13}{16}$.

Step 2: Select the symbol that correctly compares the fractions.

$\frac{13}{16}$ $\frac{7}{8}$

Fraction Pieces

Fast Track

In the Fast Track, students can accelerate based on demonstrated mastery.

MATH TALK 100	MATH TALK 100	COMPLETE IT 200
COMPLETE IT 200	WILD CARD 600	COMPARE AND ORDER 300
COMPARE AND ORDER 300	FIND OR FIX 400	FIND OR FIX 400

SCORE

2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0

Success Zone

Built as a game board with choice, the Success Zone features problems designed to mirror items students will encounter on new assessments, providing critical practice in a rewarding, fun space.

Brain Arcade

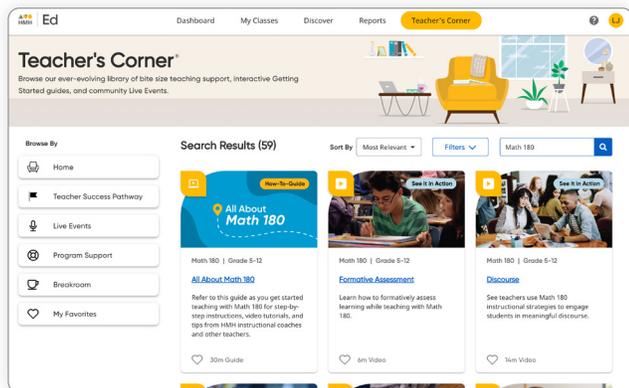
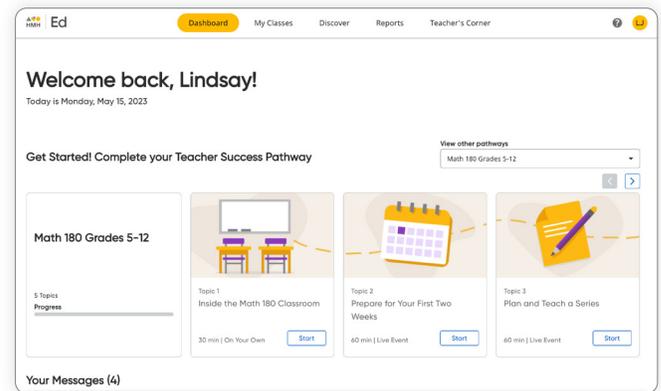
The Brain Arcade provides games that build both computational and strategic fluency. Students advance through levels independent of the Student Application performance.

Unlimited Support with Professional Learning

HMH Professional Learning helps special education teachers develop a deeper understanding of how to use specific and actionable data from placements and program assessments for direct instruction and to support the Student Application. HMH provides the highest-quality implementation support and ongoing Professional Learning delivered live, online, and via asynchronous learning.

Personalized Guided Support

Teacher Success Pathways build teacher confidence in the first 30 days.

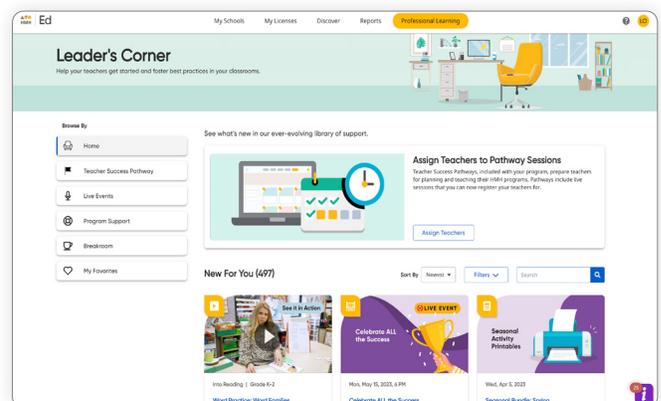


Teacher's Corner

Support continues throughout the year with a searchable library of articles and videos, live online events, on-demand recordings, and so much more!

Leader's Corner

Administrators can also access on-demand resources, leader-specific live events, resources for PLCs, and downloadable templates for classroom observations.



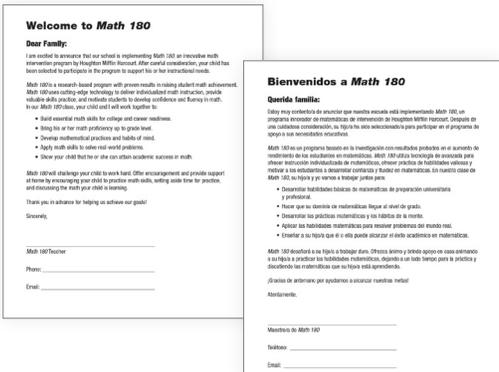
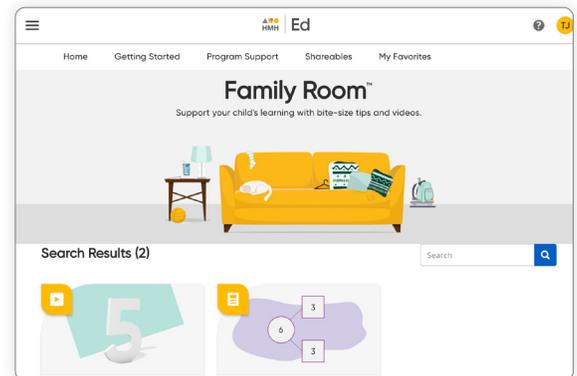


Encouraging Relationships with a School-to-Home Connection

HMH is dedicated to providing caregivers with valuable resources to help them support their child's education outside of the classroom. With 24/7 assistance, this platform and program offer practical guidance on how to promote learning, manage difficult behaviors, overcome social isolation, and encourage a positive mindset. We are committed to supporting caregivers every step of the way!

Family Room

Prioritizing family involvement for students, teachers, and caregivers is easy with the Family Room on *Ed*. It offers convenient access to helpful tips, videos, and even student assignments, ensuring a user-friendly experience.



Parent Letter

Available in English and Spanish, this letter explains the goal of the *Math 180* program, the steps children will be completing as they learn, and ways to reinforce their learning at home.

Award Certificates

Teachers can print award certificates as students master different instructional blocks. The certificates can be shared with students' guardians and used as examples of student achievement and progress.



Strategic Investments

Create Lasting Impacts

HMH has additional resources that can be used to prepare funding applications and school-level plans. *Math 180* is aligned to key federal funding priorities as well as state and local initiatives for student success.

IDEA

IDEA, Part B ensures that children with disabilities have access to a free, appropriate public education designed to meet their unique needs.

Title I

Title I, Part A provides additional academic support and learning opportunities for low-achieving, disadvantaged youth.

Title IV

Title IV offers students access to a well-rounded education and improves school conditions for student learning.

Additional Approved Funding Sources:

- State & Local Funds
- ESSER
- School Improvement
- Foundation & Private Grants

Math 180[®]
IDEA, Part B Alignment
 Education of Children with Disabilities

GRADES 5–12
 Comprehensive Math Intervention
 Moderate Evidence

The purpose of IDEA, Part B – Formula Grant Programs is to assist states in providing a free, appropriate public education (FAPE) in the least restrictive environment for children with disabilities ages 3 through 21.

The following chart shows how **Math 180[®]** can support children with disabilities under IDEA, based on key components and recommendations from IDEA, Part B, Section 611.

IDEA, Part B Components	Math 180
Provide research-based and scientifically validated interventions	Math 180 is an intervention program designed to empower striving students to gain understanding and mastery of the essential skills and concepts necessary to unlock algebra and advanced mathematics. Since the development of emotional and social competencies essential for success in college and career readiness, Math 180 provides the support students need to gain knowledge and skills essential for college and career success. Six blocks of instruction feature high-interest themes while helping students make connections while learning to think. Six blocks of instruction include the following: <ul style="list-style-type: none"> • Multiplicative Thinking • The Distributive Property • Division • Fraction Concepts • Fraction Relationships • Fraction Multiplication & Division • Decimals and Place Value • Decimal Operators • Both Sides of Zero
	<ul style="list-style-type: none"> • Rates in Time • Rate & Ratio • Ratio Relations • Percent & Pro • Proportional • Linear Relations • Graphs in the • Functions • Systems of Eq
RESEARCH	These research-based principles have been engineered into transform math instruction so that students believe in the pi and that teachers have cutting-edge tools to accelerate it. grade-level mathematics.

Math 180[®]
Title IV, Part B Alignment
 21st Century Community Learning Centers

GRADES 5–12
 Comprehensive Math Intervention
 Moderate Evidence

The purpose of Title IV Part B – 21st Century Community Learning Centers (21st CCLC) program is to support the creation of community learning centers that provide academic enrichment opportunities during non-school hours for children, particularly students who attend high-poverty and low-performing schools. The program supports students meet state and local standards in core academic subjects, such as reading and math, offers students a broad array of enrichment activities that can complement their regular academic programs, and offers literacy and other educational services to the families of participating children.

The following chart shows how **Math 180[®]** can support a 21st CCLC program.

Title IV, Part B Components	Math 180
Activities that provide remedial education activities, including additional assistance to students to allow the students to improve their academic achievement	Math 180 is a blended learning intervention program that empowers students to learn the content that is foundational to algebra. Leveraging research on effective mathematics teaching and learning, and the need for educator support in implementing educational innovations, Math 180 is built around a focused and coherent curriculum that enables struggling students to progress quickly and effectively toward grade-level curriculum.
	ACCELERATING STUDENTS TO GRADE LEVEL For students who are two or more years behind in math, time is of the essence. Researching every missed skill and concept simply isn't possible. Math 180 focuses on deep understanding and mastery of the essential skills and concepts necessary to unlock algebra and advanced mathematics. The Math 180 scope and sequence is built around a focused and coherent curriculum that enables students to progress swiftly and successfully toward grade-level curriculum.
	FOCUSING ON WHAT MATTERS MOST FOR ALGEBRA An essential element of Math 180 is the delivery of a coherent curriculum in which concepts build on one another cumulatively and in a logical progression. Rather than being an unlinked series of tricks and shortcuts, math must make sense, and knowledge should build on a series of progressions between grades and topics. To accelerate students to grade level, the program maintains a tight focus on the concepts, strategies, and content knowledge that matter most. Those along the progression to algebra. Math 180 delivers a concise and highly focused mathematics framework designed to maximize the value of instructional time. Each lesson provides a new concept or strategy that will be used repeatedly in future lessons, as students continually expand their toolbox of mathematical vocabulary terms, procedural strategies, and visual manipulates.
	MAKING PROGRESS BY MAKING CONNECTIONS Students in Math 180 progress from concrete to pictorial to abstract representations of each concept—they learn with understanding, far beyond the automatic replication of an algorithm. In each successive unit of Math 180, students are encouraged to activate their prior learning and to access the

Math 180[®]
Title I, Part A Alignment
 Improving Basic Programs

GRADES 5–12
 Comprehensive Math Intervention
 Moderate Evidence

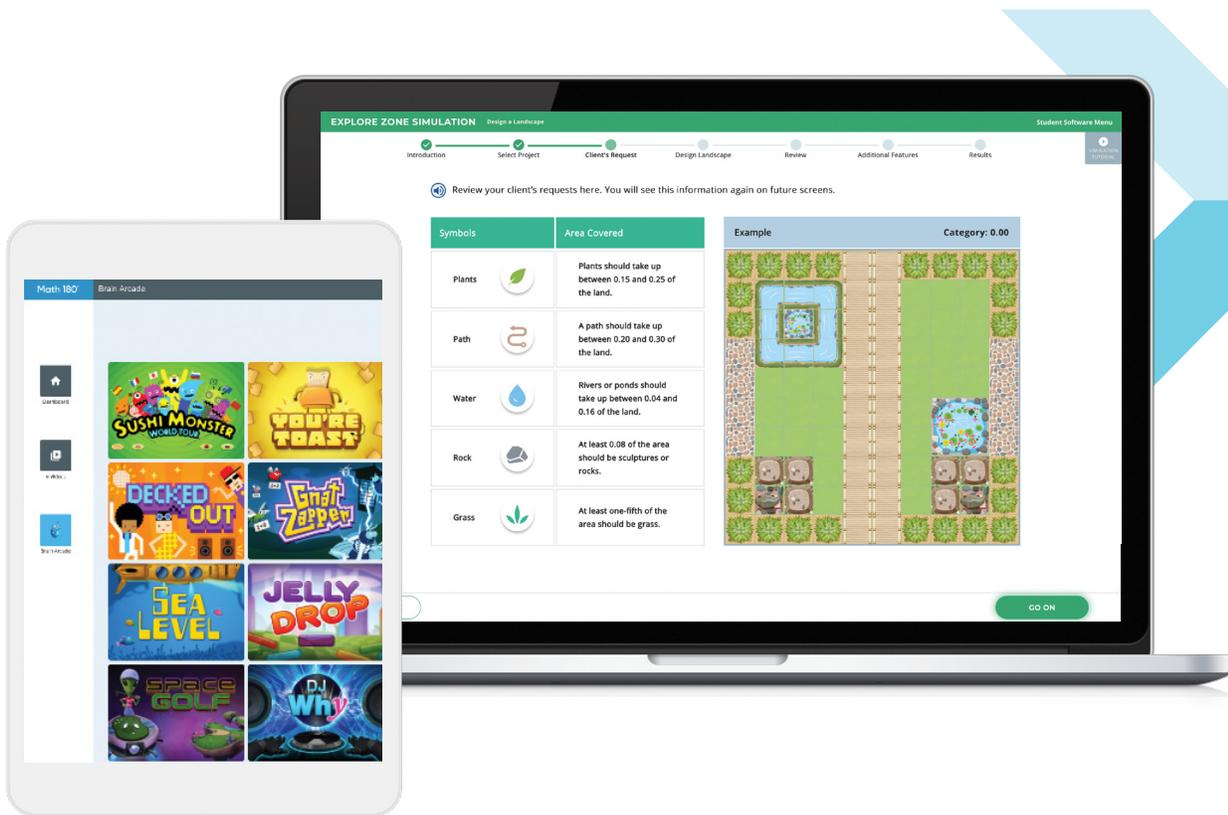
The purpose of Title I, Part A – Improving Basic Programs Operated by Local Education Agencies is to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments. Schools receiving Title I funds must develop a plan to improve teaching and learning.

The following chart shows how **Math 180[®]** meets the components for Title I, Part A Funding.

Title I, Part A Components	Math 180
Provide opportunities for all students to meet grade-level proficiency, particularly in the areas of math, reading, language arts, and science	Math 180 is an intervention program designed to empower struggling students to gain understanding and mastery of the essential skills and concepts necessary to unlock algebra and advanced mathematics. Because the development of emotional and social competencies essential for success in college and career works hand-in-hand with efforts to improve students' content knowledge, Math 180 is rooted in relevance and real-world connections, providing a rich landscape for learning in multiple domains. Leveraging rigorous state standards based on the research of effective mathematics teaching and learning and the need for educator support in implementing educational innovations, Math 180 provides the support students need to develop key knowledge and skills essential for college and career success. Six blocks of instruction feature high-interest themes while the focused content helps students make connections while learning to think algebraically. The six blocks of instruction include the following: <ul style="list-style-type: none"> • Multiplicative Thinking • The Distributive Property • Division • Fraction Concepts • Fraction Relationships • Fraction Multiplication & Division • Decimals and Place Value • Decimal Operators • Both Sides of Zero
	<ul style="list-style-type: none"> • Rates in Time • Rate & Ratio • Ratio Relations • Percent & Proportional • Proportional Relationships • Linear Relations • Graphs in the Plane • Systems of Equations
	Math 180 includes a comprehensive suite of high-quality assessment tools and reports to monitor progress and differentiate instruction. Growth Measure [™] determines readiness for Math 180 and establishes a baseline for measuring mathematical growth. Throughout, students can take a Fast Track assessment, which provides an accelerated route through the software. Curriculum-embedded assessments, called <i>miniVUE</i> , measure comprehension of the lesson presented during group instruction.



Where Limits Don't Exist!



Experience HMH *Math 180* online at hnhco.com/sample or learn more at hnhco.com/math180

