



MATH ROCKS

From the creators of



Closing the Math Gap

Nationwide, more than two-thirds of middle school students are behind in math.

Perhaps even more students believe math does not relate to their lives, so they lack motivation to master it.

Finally, no existing curriculum succeeds at serving all students' needs.

MATH ROCKS is a bold new curriculum booster that tackles these intertwined challenges head-on. It catches up students in grades 5-8 who are below proficiency, while still engaging students at or above grade level.

From Bedtime Math Foundation

Bedtime Math Foundation has reached hundreds of thousands of children at home and in school as part of our mission to **elevate every kid's math confidence and abilities.**

Gold-standard research of our programs shows that math conversations give kids **3 extra months of math skills** and that hands-on learning significantly **reduces math anxiety**, all leading to better performance in the classroom.



Math Rocks: How It Works

Activities are designed to start with a mini lesson followed by differentiated small group work. Serves **groups of 4 students**, a proven effective size from high-dosage tutoring studies.

- 10 lessons solidify key math skills **essential to cumulative learning**
- Activities motivate students by showing the **real-life relevance** of skills through a band-on-tour theme
- Optimal rollout **first 2 weeks of the school year in middle school**
- Also effective as a **fifth-grade finale** and in **summer school**

Key Skills

Fractions, decimals and percentages: Students need to be “trilingual” in **fractions, decimals and percentages** to convert values fluidly in equations and word problems. Without this foundation, students cannot proceed to algebra.

Basic operations: When students can't perform **addition, subtraction, multiplication and division** on multi-digit numbers, they cannot advance to solving word problems or acquiring more advanced skills.

Multiples of digits up to 100: Many students don't know **multiples of digits up to 100**, or their multiples of 13, 17 and so on. When they attempt long division, homework that should be simple turns into hours of frustration.

Order of operations: When students do not understand the reasoning behind the order, they cannot master word problems, often “pulling an operation out of a grab bag” instead of finding a rational approach. Identifying the right sequence **prepares students for algebraic thinking**.

Research-Backed Concepts

See Appendix

MATH ROCKS is built on years of research-backed math content developed by Bedtime Math. It unites **math talk**, relevant **real-life application** and small-group **screen-free learning** to engage students and bring them to grade level.



University of Chicago study published in *Science* found kids who did **Bedtime Math** **improved their math skills by 3 months** in one school year.



Johns Hopkins study showed **Crazy 8s Club** **significantly reduced math anxiety** for elementary-age kids.



New Jersey Tutoring Corps found stronger gains for students who **used hands-on materials** from **Fun Factor** (the precursor to Math Rocks) compared to the control group.

The Line-Up: 10 Activities

Activity	Description	Skills
Band on Tour	Teams tour US cities, performing calculations with decimals along the way to determine their band's earnings.	Adding, subtracting, multiplying and dividing decimals
Spotify Me	How popular is the band? Compare Spotify streaming stats with the most popular artists to understand powers of 10.	Multi-digit numbers, powers of 10
Setlist Showdown	Evaluate expressions and tweak the setlist to hit a target show length.	Order of operations, decimals, converting units of time
Glow Big or Go Home	Master geometry basics by designing the stage floor and backdrop using glowing lattices.	Geometry, angles, division, estimation
Amp It Up	Calculate how much electricity is needed to power up the band's lighting and sound system.	Place value, decimals, unit conversion, order of operations
VIP Parking	The stadium is filling fast! Break it down with prime factors to see how many vehicles fit and how many fans that adds up to.	Order of operations, fluency with prime factors
Party in the Green Room	You just played a sold-out show! Compare fractions to figure out how many ways you can slice the cake to celebrate!	Fractions
Fuel Up	Plan the band's pre-show meal to hit a perfect ratio of carbs, protein and fat by using nutritional labels.	Order of operations, fractions, percentages
Roadie Load-in Challenge	Calculate how to load up the gear efficiently from one venue to the next.	Units of measure, area, volume
Show Me the Money	It's expensive to produce a concert! Crunch the numbers to see how many tickets you need to sell to break even.	Decimals, fractions, percentages, order of operations

Pricing

As part of our nonprofit mission, Bedtime Math subsidizes the cost of MATH ROCKS. We ask schools to make a cost-share contribution of \$50 per set for 4 students, plus \$10 shipping.

That's just **\$1.25 per student per activity**.

Each kit includes hands-on materials and activity sheets for 10 lessons. Professional development is available and strongly recommended.

Next Steps

Are you ready to amp up your students' math skills? Schedule a call to discuss.

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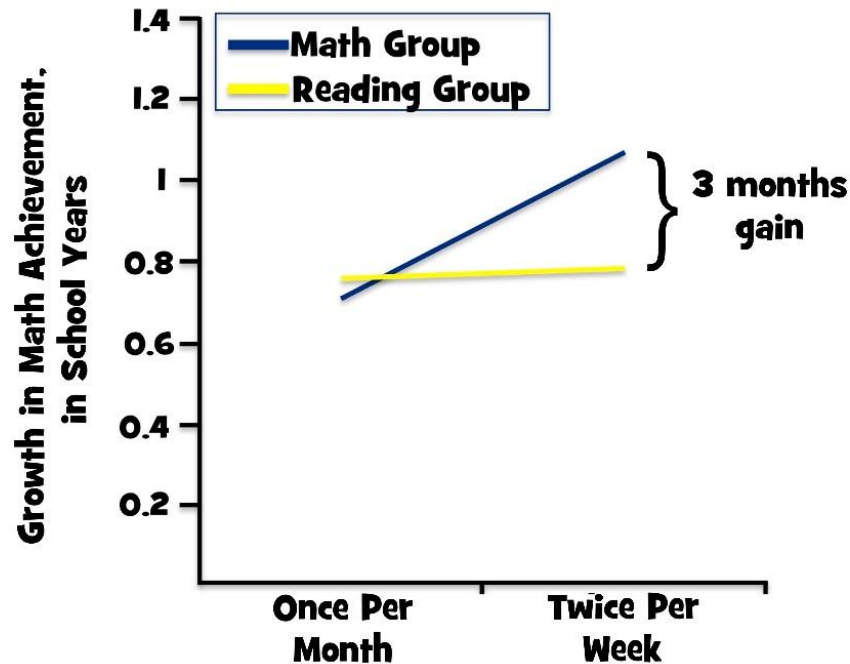
Appendix: Research Basis

Appendix A

Research - Bedtime Math

Proven concept: Math talk builds skills, reduces math anxiety

Details: University of Chicago found that kids who did Bedtime Math with their parents as little as once a week improved their math skills on average by **three months** more than kids who didn't use it. Kids were still ahead **two years later**.



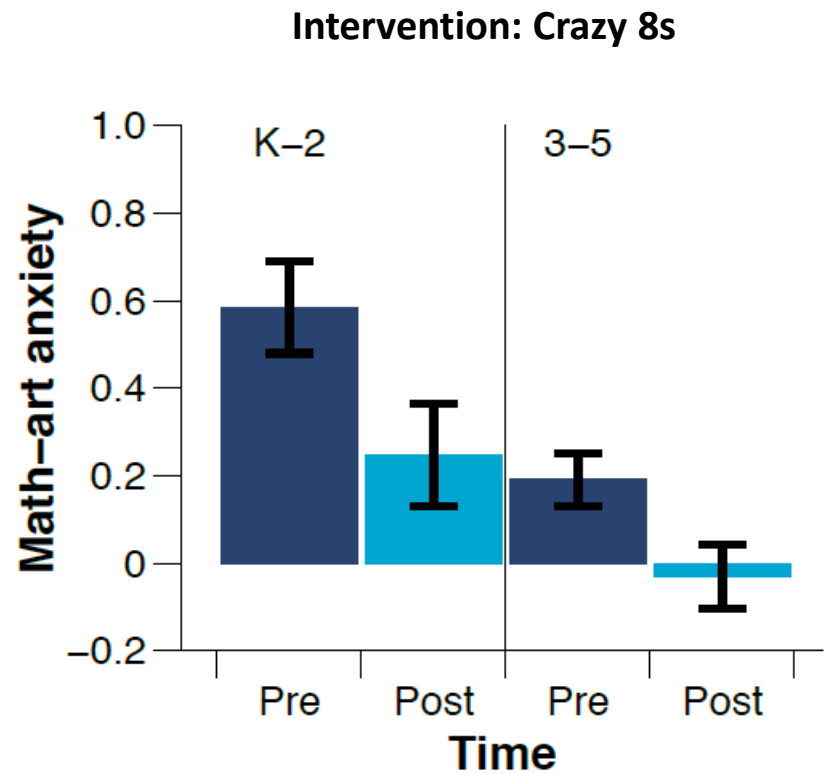
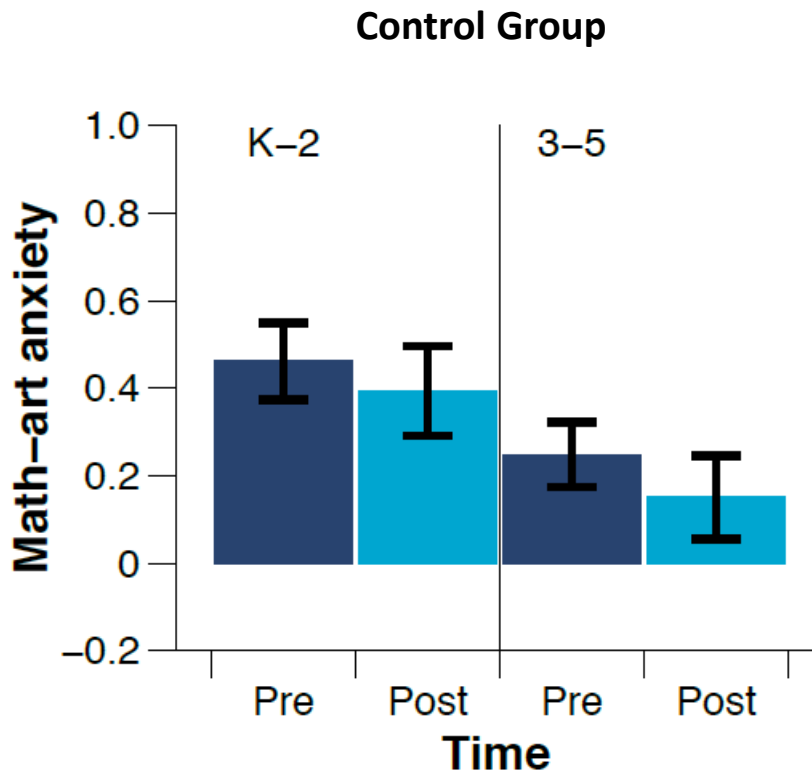
Sources: [Science](#), [Journal of Experimental Psychology](#)

Appendix B

Research - Crazy 8s Club

Proven concept: Benefits of getting off screens, onto hands-on content

Details: A study conducted by Johns Hopkins University showed that Crazy 8s significantly **reduces students' math anxiety** after just eight weeks.



Appendix C

Research - Fun Factor

Proven concept: Small-group, high-dosage interventions

Details: After 6 weeks of tutoring and using Fun Factor, the number of students who **tested at or above grade level almost doubled**, rising from 27% to 48%. Those exposed only to the tutoring curriculum over the same time period rose only from 22% at/above grade level to 29%.

