



#LATEACHERLEADERS



SUMMIT 2023

ACCELERATE TO SUCCESS

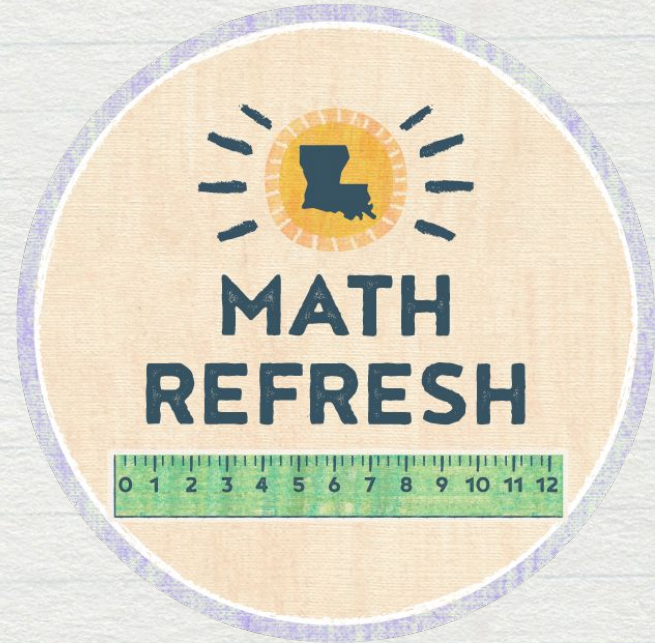


State of Louisiana Math

Objectives

By the end of this presentation, participants will

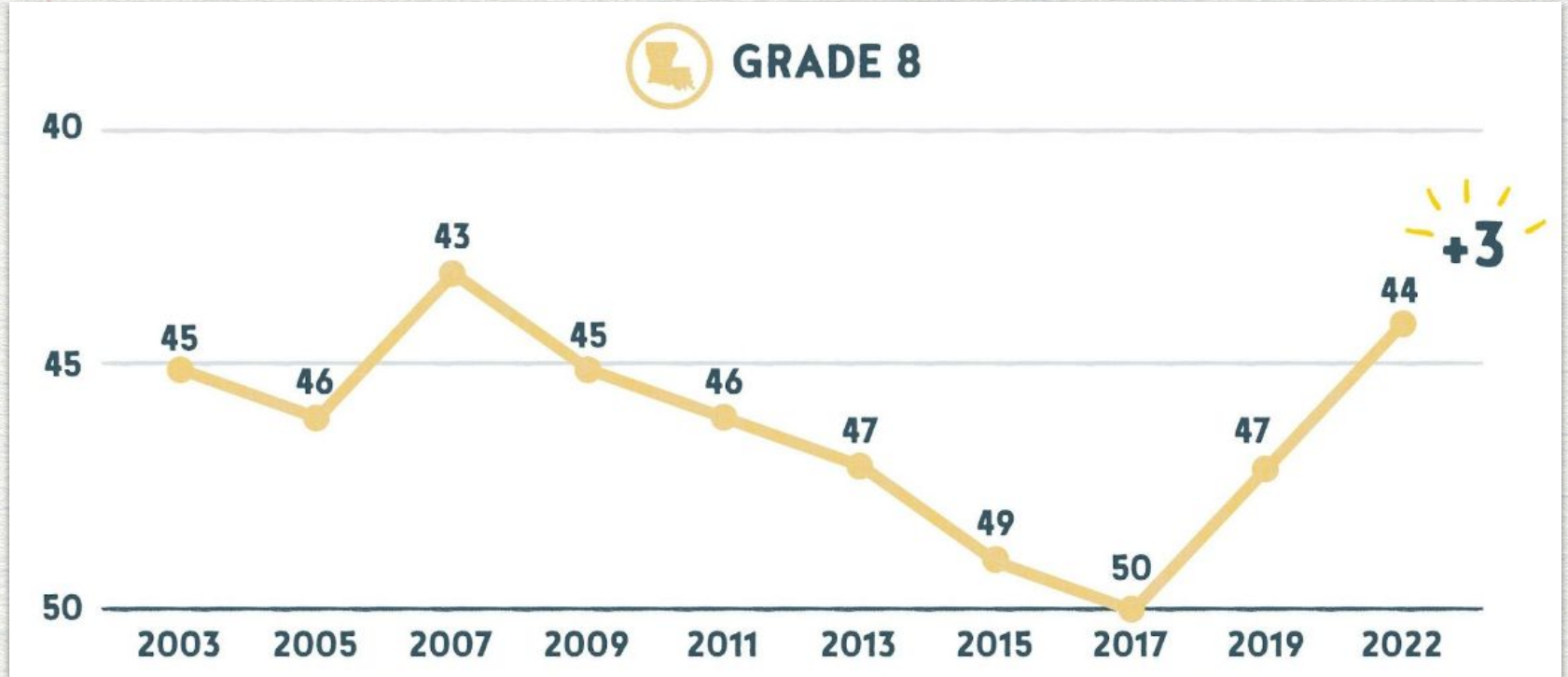
- build an understanding of Louisiana's Math Refresh;
- determine practices that will impact math learning for students; and
- prioritize math needs in your school and system.



Grade 4 National Ranking in Math



Grade 8 National Ranking in Math



National Ranking

	Louisiana 2019 NAEP Ranking	Louisiana 2022 NAEP Ranking	Rank Change
Grade 4 Reading	48	40	↑ 8
Grade 4 Math	47	40	↑ 7
Grade 8 Reading	44	36	↑ 8
Grade 8 Math	47	44	↑ 3

National Ranking

Louisiana 2019
NAEP Ranking

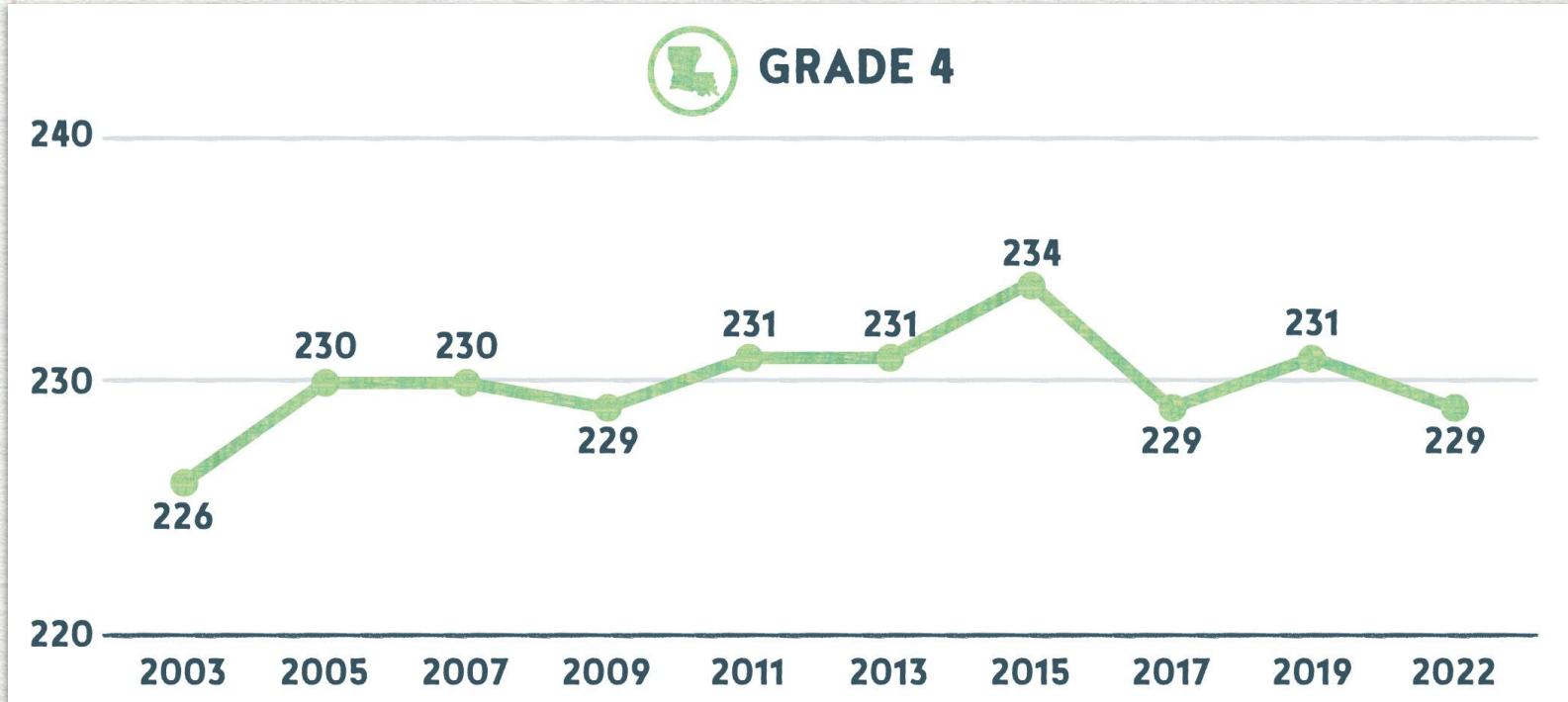
46

Louisiana 2022
NAEP Ranking

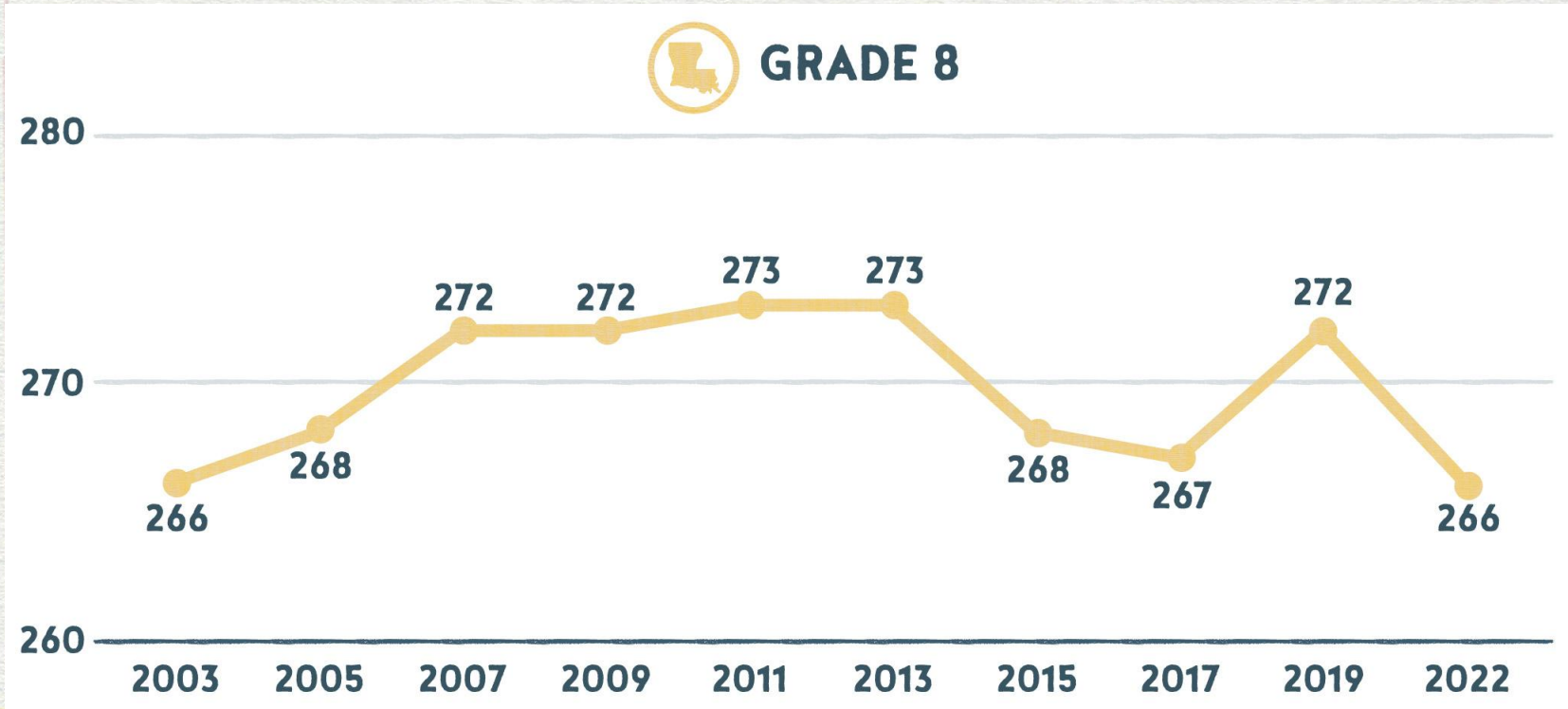
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Highest overall national ranking since 2003

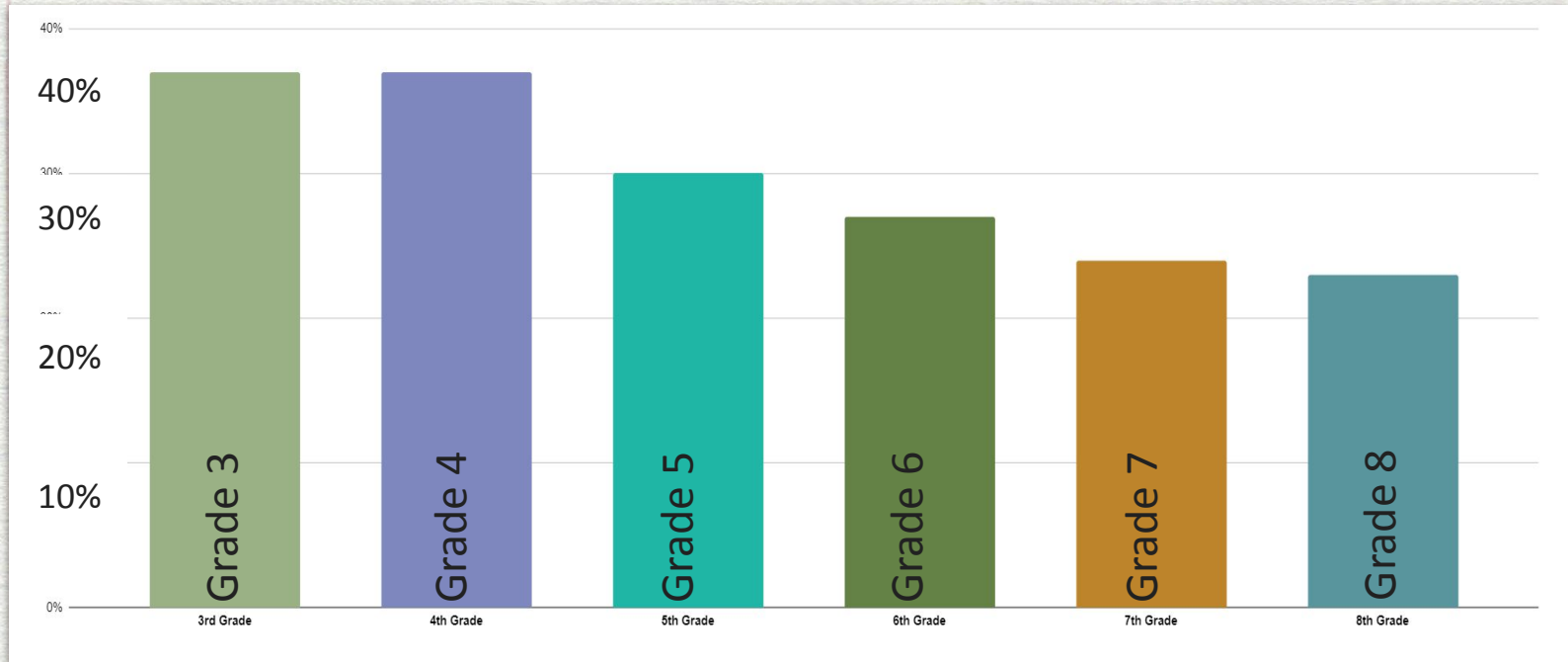
Grade 4 NAEP Scale Scores



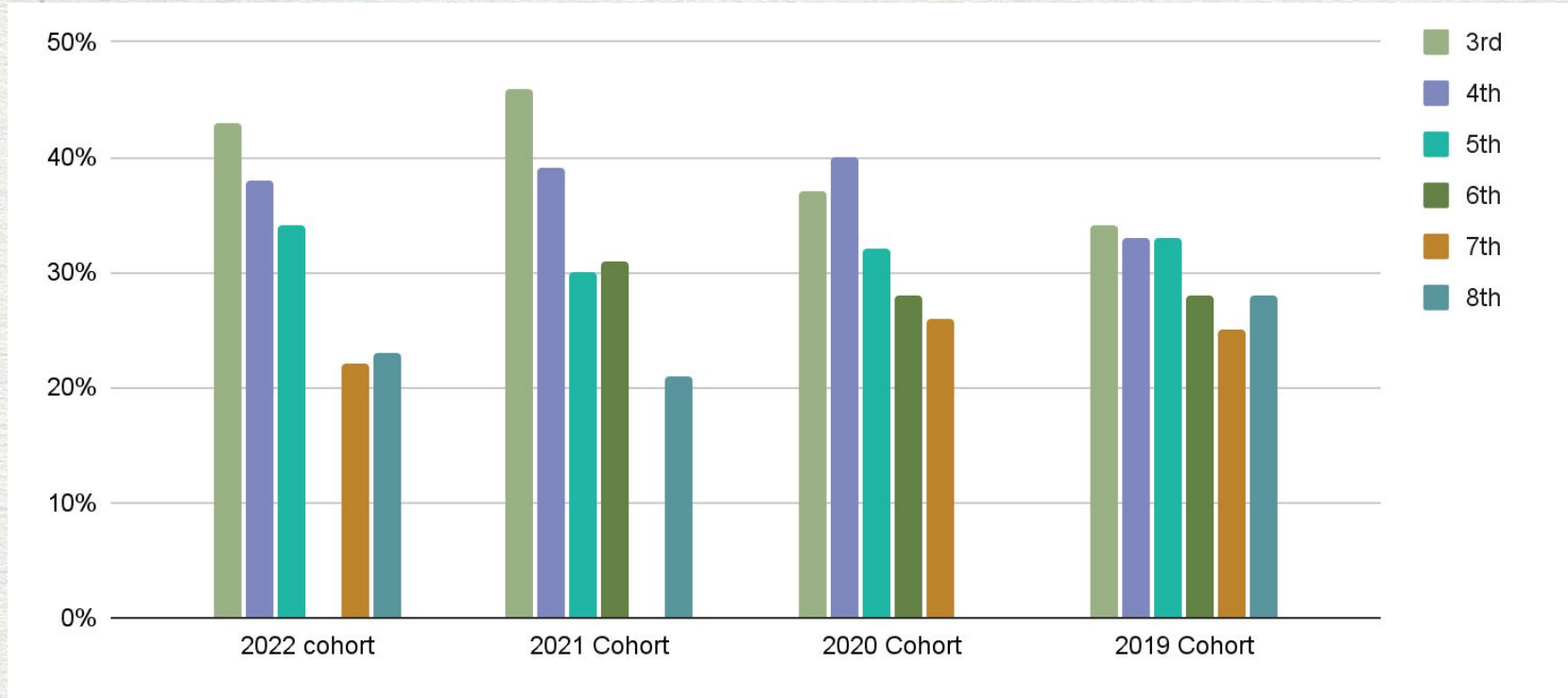
Grade 8 NAEP Scale Scores



2022 Math Proficiency on LEAP



2019-2022 Cohort Mastery on LEAP



ZEARN Impact Study

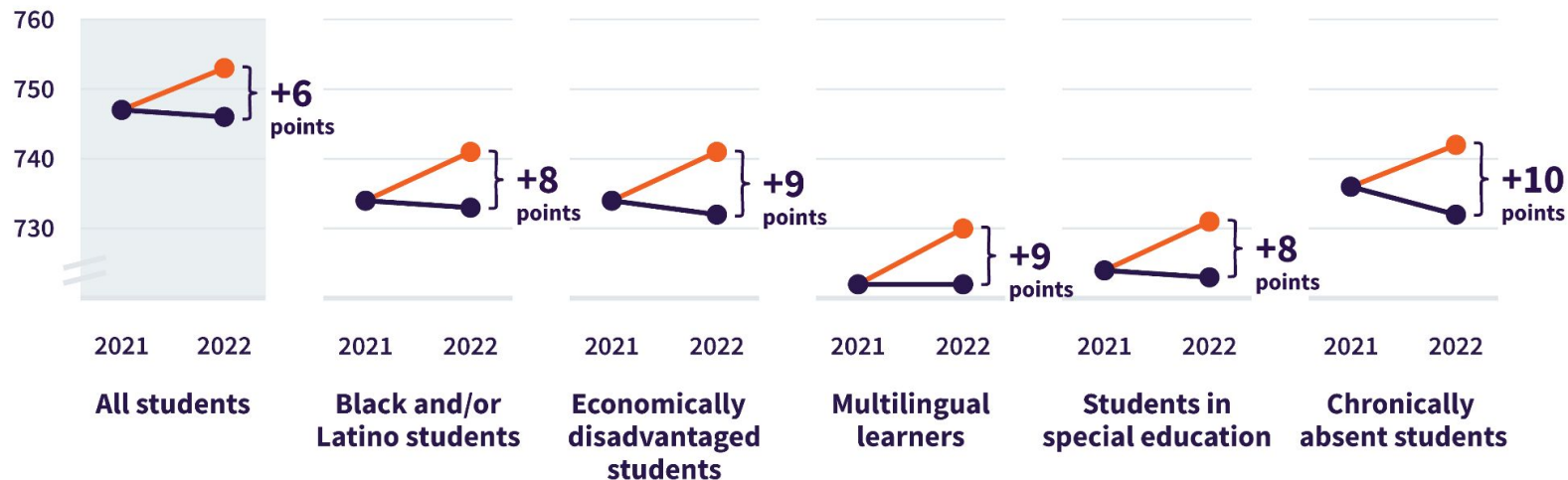
Key Findings

- ✓ **Elementary and middle school students who consistently used Zearn Math scored significantly higher on 2022 LEAP than matched peers** who did not use Zearn Math. This finding was consistent across Black and/or Latino students, economically disadvantaged students, multilingual learners, students in special education and chronically absent students.
- ✓ **Impact was greatest for Louisiana students not yet meeting Mastery:** these students gained 1.5 to 2.0 years of math learning in one academic year when they consistently used Zearn Math.
- ✓ **70% of students at the lowest level of math achievement who consistently used Zearn Math improved their achievement level** on the 2022 LEAP, compared to just 45% of students at the same starting level who did not use Zearn.

Across student subgroups, Louisiana students who consistently used Zearn increased math scores more than matched peers who did not use Zearn

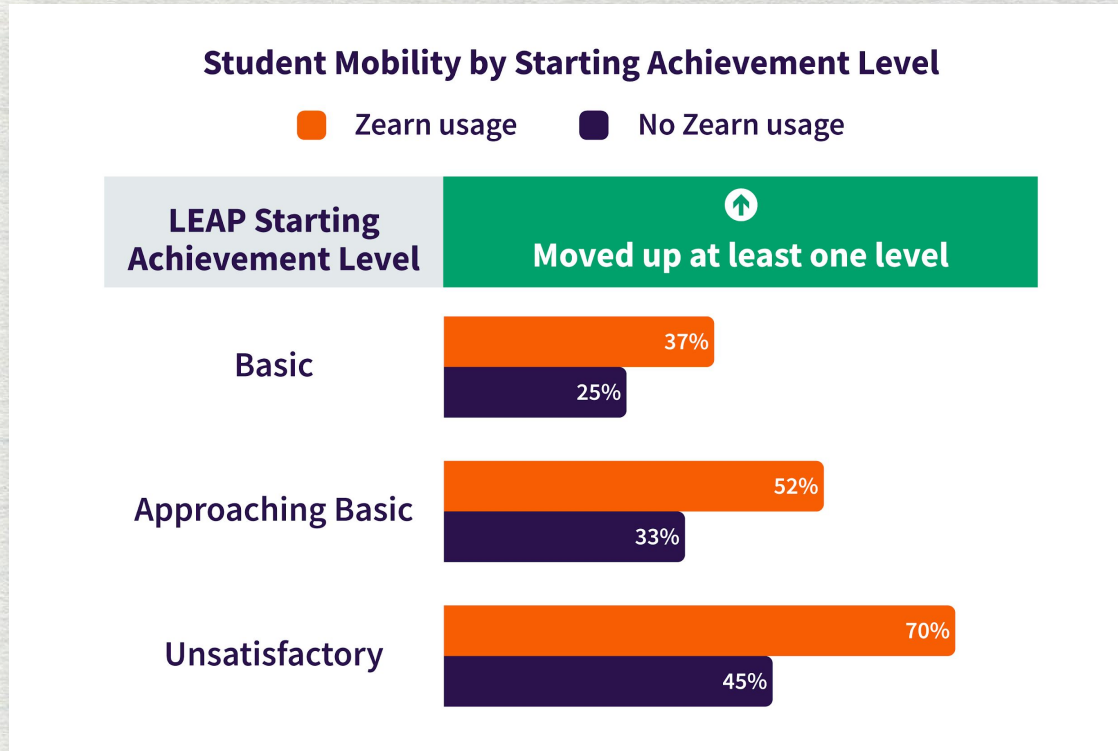
Impact of Zearn Math on 2022 LEAP Scale Scores by Student Subgroup

■ Zearn usage ■ No Zearn usage



Baseline scores represent averages of Zearn users and non-users' 2021 LEAP scores in cases where starting scores were not identical.

70% of students at the lowest level of math achievement who consistently used Zearn Math improved their achievement level in 2022



Louisiana's 2027 Math Goal

239

By 2028, average 4th grade NAEP math scaled score will increase to 239.

276

By 2028, average 8th grade NAEP math scaled score will increase to 276.

+10

These average scaled scores in represent a ten point increase between 2012 and 2027.

mid
20s

This goal would lead to a Louisiana ranking in the 20s if other states' performances remain constant.

Louisiana's Math Pillars



school structures
prioritize **all students'**
successful engagement
in **high-quality,**
grade-level core math
instruction alongside
peers



timely, proactive
interventions
connecting
prerequisite learning to
upcoming and current
grade-level work



ongoing
professional
learning and
proactive planning
are essential for
effective teaching
and accelerating



families,
caregivers, and
communities play
an essential role at
all ages and stages

The [Louisiana Math Comprehensive Plan](#) outlines state and system actions to support math success for all students.



Accelerating Math Learning

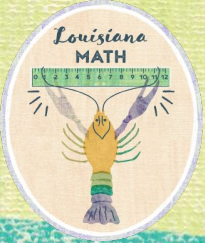
more of this...	less of this...
<ul style="list-style-type: none">● emphasis on <i>forward movement</i>; unfinished math learning is systematically addressed just in time for new concepts● ensuring all students, including students with disabilities and English Learners, have daily access to high-quality, grade-level learning alongside peers● math instruction across settings (e.g., tutoring, extended learning time) is connected to core instruction and of the same standard of quality, prioritizing individualized supports that ensure readiness to engage in grade-level work	<ul style="list-style-type: none">● emphasis on <i>backward movement</i>, reteaching every “missing” skill or concept in isolation from grade-level work● structuring extended learning time and interventions so that students miss sacred core ELA, math, science, or social studies instruction● instructional and intervention time is passive and isolated from core (e.g., focused on worksheets or computer-based fluency drills), and/or students are engaging with work that is better suited for earlier grades

High-Quality, Grade-Level Instruction



All students engage in **high-quality, grade-level core math instruction** alongside peers

- Refresh of [math materials](#) for the 2023-2024 school year
- Coming Soon:
 - Math Refresh Leader Toolkit
 - [Summer Webinar Series for Leaders](#)



Louisiana Math Landing Page

PROFESSIONAL LEARNING AND WEBINARS

File	Download
Louisiana's Math Refresh - October 6, 2022	Download
Math Refresh Office Hours Dec 2022	Download
Zearn Training for Louisiana Educators	Download
Zearn Training for Louisiana Leaders	Download

Louisiana Math Refresh October 6, 2022

HIGH-QUALITY PILOTS

File	Download
Eureka Math Squared 2023-2024 Pilot Implementation Overview	Download
Zearn Louisiana Implementation Overview	Download

RESOURCES

File	Download
High-Quality Math Curriculum	Download
Math Refresh Funding Guidance	Download
Math Refresh Support Schedule	Download

- expanding the suite of resources to support educators and leaders in accelerating math learning
- “one stop shop” for all things Math Refresh

Learning Acceleration



timely, proactive interventions connecting prerequisite learning to upcoming and current grade-level work

- Accelerating Math Instruction Guidance
 - [Accelerating Learning in High School](#)
 - [Best Practices for Accelerating Math Learning](#)
 - [Accelerate Math](#) resources
- Coming Soon:
 - Foundational Lessons to Accelerate Math Education (FLAME)
 - Math Refresh Leader Toolkit

Accelerate Tutoring Resources



Grade 6 - Eureka Math			
Session Accelerates to these Grade-Level Lessons	Session Focus Topic:	Connected Grade-Level Standards	Source Content Foundational Standards
Acceleration Tool Module 1 Topic A			
Module 1 Topic A Lessons 1-4 Module 1 Topic A Lessons 1-4 Exit Ticket	<ul style="list-style-type: none"> use the area model and multiplication to show the equivalence of two fractions determine what fraction equal to 1 is used to generate equivalent fractions 	6.RP.A.1, 6.RP.A.3	Grade 4 Module 5 Grade 5 Module 4 Foundational Standards 4.NF.A.1, 5.NF.B.6
Module 1 Topic A Lessons 5-8 Module 1 Topic A Lessons 5-8 Exit Ticket	<ul style="list-style-type: none"> solving two-step word problems including multiplicative comparison. Interpret a fraction as division find the value of a fraction write a fraction as a decimal 	6.RP.A.1, 6.RP.A.3	Grade 4 Module 3 - L1 Grade 5 Module 4 - L1 Foundational Standards 4.OA.A.2, 5.NF.B.6
Acceleration Tool Module 1 Topic B			
Module 1 Topic B Lessons 9-11 Module 1 Topic B Lessons 9-11 Exit Ticket	<ul style="list-style-type: none"> make tables of equivalent ratios relating quantities with whole number measurement and find missing values in the tables 	6.RP.A.3a	Grade 5 Module 6 Foundational Standards 5.OA.B.3



LOUISIANA DEPARTMENT OF EDUCATION

Accelerate to Grade 6 Eureka Math Module 1 Topic C Lessons 16-18

These tutoring sessions are designed to prepare students for grade 6 Eureka Math, Module 1, Lessons 16-18. These resources should be delivered the week prior to instruction on this content.

These resources were developed by teachers, for teachers and are considered living documents. If you notice an error, or if you have any questions or suggestions, please share your feedback with us.

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Grade 6, Module 1, Lessons 16-18

Focus standard for slides: 6.RP.A.2, 6.RP.A.3a
 Prerequisite Standards: 5.NF.B.2, 5.NF.A.1, 4.NF.A.1
 Foundational equivalent ratios, rate, unit rate, decimal, fraction, percentage
 Operations: division, multiplication
 Major conceptual understanding: application
 Manipulatives/ Materials: [Grade 5 Multiplication Reference Sheet](#), [Division Reference Sheet](#), [Decimals Reference Sheet](#), [Fractions Reference Sheet](#), [Number Line](#)
 6.RP.A.2, 6.RP.A.3a, 6.RP.A.3b, 6.RP.A.3c, 6.RP.A.3d

These tutoring sessions are designed to prepare students for grade 6 Eureka Math, Module 1, Lessons 16-18.

In Lesson 16, students develop their vocabulary and conceptual understanding of rate as they work through and discuss problems that require expressing equivalent ratios using phrases such as “per each” and “for every.” In Lesson 17, students explore rates and unit rates as they work through and discuss problems that require expressing equivalent ratios using phrases such as “per each” and “for every.” In Lesson 18, students explore the relationship between a unit rate and a rate and apply the unit rate to solve problems. The goal of this session is to prepare students for finding a unit rate and define the term unit rate relating to the value of a ratio.

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Grade 6, Module 1, Lessons 16-18 Session 1

Today we will:

- interpret a fraction as division, and
- write a fraction as a decimal.

You will need the following materials:

- write on card paper or a sheet protector
- dry erase marker

LOUISIANA DEPARTMENT OF EDUCATION

Grade 6, Module 1, Lessons 16-18

Focus standard for slides: 6.RP.A.2, 6.RP.A.3a
 Prerequisite Standards: 5.NF.B.2, 5.NF.A.1, 4.NF.A.1
 Foundational equivalent ratios, rate, unit rate, decimal, fraction, percentage
 Operations: division, multiplication
 Major conceptual understanding: application
 Manipulatives/ Materials: [Grade 5 Multiplication Reference Sheet](#), [Division Reference Sheet](#), [Decimals Reference Sheet](#), [Fractions Reference Sheet](#), [Number Line](#)
 6.RP.A.2, 6.RP.A.3a, 6.RP.A.3b, 6.RP.A.3c, 6.RP.A.3d

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Coming Soon: Foundational Lessons for Accelerating Math Education (FLAME)

New resources are coming to support teachers in building students' foundational math skills in grades K-5.

FLAME resources will provide

- activities designed to build grade-level foundations alongside high-quality resources;
- formative tools for teachers to understand students' learning; and
- tools to communicate to parents.



Professional Learning

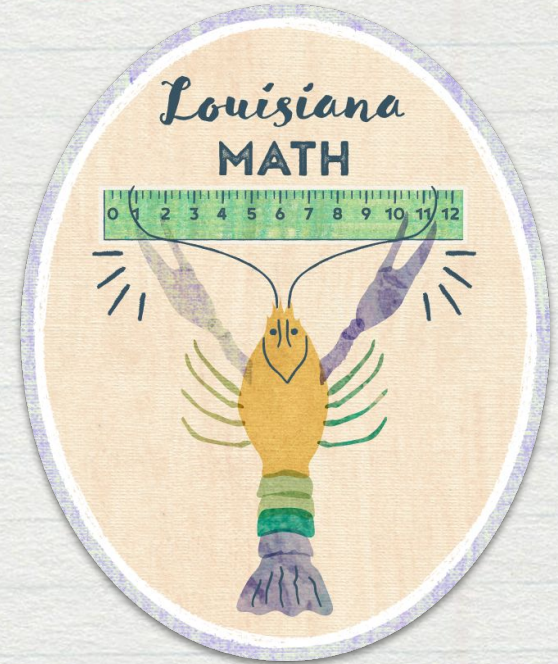


ongoing **professional learning and proactive planning** are essential for effective teaching and accelerating

- Foundational skills training for grade 4-8 teachers
- Training of pre-service teachers through mandatory post-secondary coursework
- [Professional Learning Roadmap](#) resources

Foundational Training for Teachers

- HB 326 - Requires teacher education program students receive instruction on foundational numeracy skills.
- SB 163 - Requires numeracy professional development for teachers.



Families as our Partners



families, caregivers, and communities play an essential role at all ages and stages

- [Summer Family Engagement Toolkit](#)
- [Grab and Go Family Resources](#)
- Coming Soon:
 - Student Progress in Mathematics tools (FLAME)



Family Math Library

FAMILY MATH ENGAGEMENT

GRAB AND GO ACTIVITIES

File	Download
Lower Elementary Grab & Go - Counting Objects	Download
Lower Elementary Grab & Go - Naming Numbers	Download
Lower Elementary Grab & Go - Verbal Counting Games	Download
Lower Elementary Grab & Go - Writing numbers	Download
Middle School Grab & Go - Compare Integers	Download
Middle School Grab & Go - Ratios	Download
Upper Elementary Grab & Go - Multiplication Practice	Download
Upper Elementary Grab & Go - Understanding Multiplication	Download

ZEARN FAMILY RESOURCES

File
Zearn Brainy Challenge Tracker
Zearn Helpers For Parents
Zearn Helpers For Parents Spanish
Zearn Helpers For Students
Zearn Parent Letter
Zearn Parent Letter Spanish



Family Math Engagement Grab & Go: Verbal Counting Games

This activity would be best used by:

Schools Families

Materials:

- this activity does not require materials

Steps:

- Count to 10 with your child.
- Count to 20.
- Continue counting to higher numbers until the child can count to 100.

Lagniappe:

- Once children are successful with the pattern at any stopping point, begin counting forward and backward. Ex. one, two, three, four, five, four, three, two, one
- Start counting at any number and advance up or down in sequence. Ex. 23, 24, 25, 24, 23, 22, 21, 20. Use hand signals like a thumbs up for counting up and thumbs down for counting down to change direction.
- Practice counting by ones, twos, fives, and tens to 100. Begin with counting up and then practice counting down.





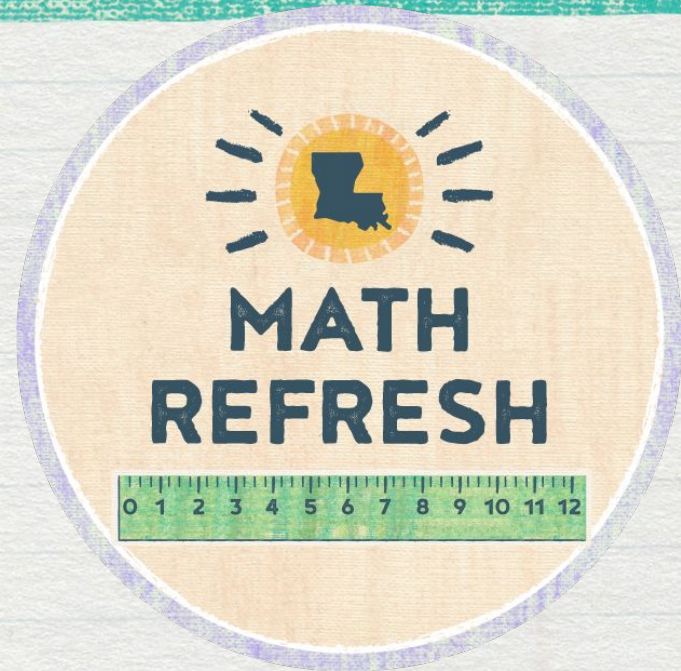
Next Steps

Initial Planning

- Refer to the [Comprehensive Plan](#)
- Refer to the planning template through bit.ly/State_of_Math2023
- Discuss, talk, reflect, plan

Refreshing Practice and Creating Urgency

- Involve and inform all stakeholders
- Use relevant data
- Allow teachers to do the good work
- Celebrate growth with teachers, students, and parents



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Please contact STEM@la.gov with questions.



Thank you