Principal Webinar for Math and Literacy

January 10, 2024

# Opening

December 1, 2023

Math

Preparing for LEAP

Mission

All Louisiana students will have improved math outcomes when the four pillars of high-quality mathematics instruction designed for accelerating learning are effectively implemented at the school, system, and state levels.
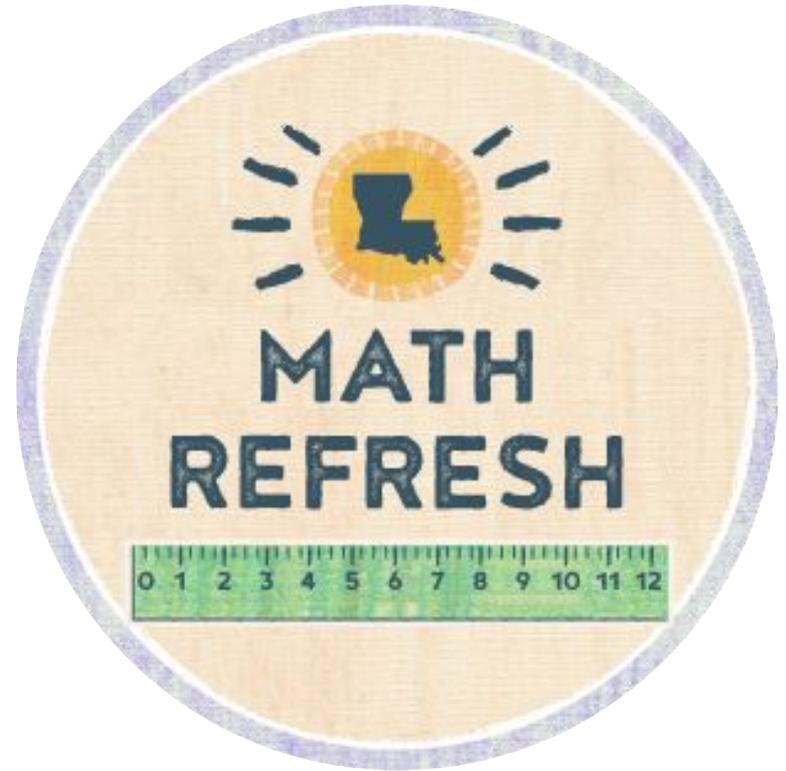
Louisiana Math Pillars
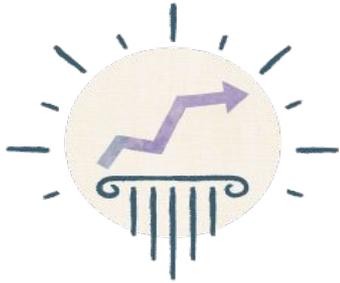
school structures prioritize **all students' ** successful engagement in **high-quality, grade-level core math instruction** alongside peers

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.

Alignment

LDOE's approach to curriculum support highlights the alignment between

- standards and curriculum;
- professional learning; and
- assessment.
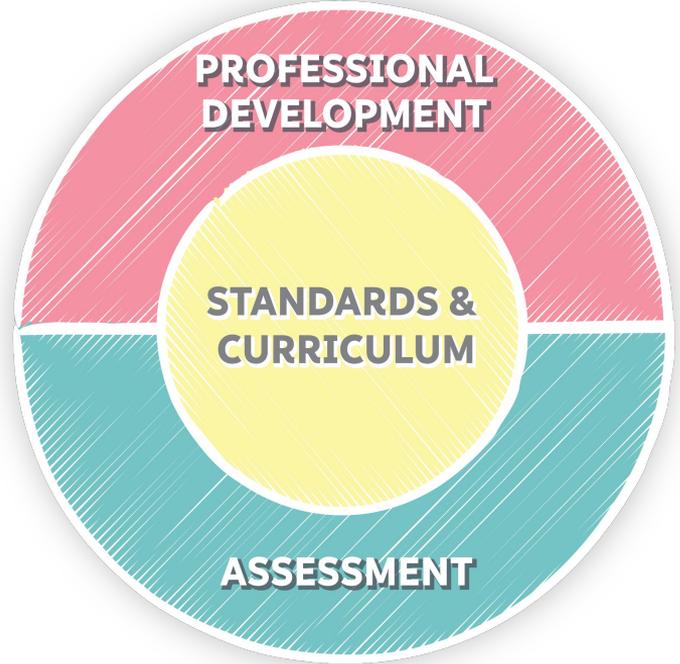
Grade 3 Test Design

Reporting Category	Session 1		Session 2		Session 3		TOTAL	
	Tasks	Points	Tasks	Points	Tasks	Points	Tasks	Points
Major Content	9-10	10	8-10	10	10	10	27-30	30
Additional & Supporting Content	3-4	4	2-4	4	2	2	7-10	10
Expressing Mathematical Reasoning	1	4	1	3	1	3	3	10
Modeling & Application	1	3	1	3	1	6	3	12
TOTAL Operational	15	21	14	20	14	21	43	62
Total Embedded Field-Test	2-3	N/A	1	N/A	2-3	N/A	5-7	N/A
Session Time	75 minutes		85 minutes		75 minutes		235 minutes	

Task Types	Point-Values	Total Tasks	Total Points		Percentage of Assessment Points	
Type I	1-point tasks	34	34	40	55%	65%
	2-point tasks	3	6		9.5%	
Type II	3-point tasks	2	6	10	9.5%	16%
	4-point tasks	1	4		6%	
Type III	3-point tasks	2	6	12	9.5%	19%
	6-point tasks	1	6		9.5%	
TOTAL		43	62		100%	

Task Types

Task Type	Description of Task Type
Type 1 Tasks assessing *concepts, skills, and procedures*	- Balance of conceptual understanding, fluency, and application - Can involve any or all mathematical practice standards - Are machine scorable items (MC, MS, SA, TEI)
Type 2 Tasks assessing *expressing mathematical reasoning*	- Each task calls for written arguments/justifications, critique of reasoning, or precision in mathematical statements (MP.3, 6) - Can involve other mathematical practice standards - Are constructed response tasks
Type 3 Tasks assessing *modeling/application*	- Each tasks calls for modeling/application in a real-world context or scenario (MP.1, 4) - Can involve other mathematical practice standards - Are constructed response tasks

Type 1

Computer scorable questions focusing on the major, additional and supporting content.

Released Item

Curriculum

Type 2
Constructed response items focused on expressing mathematical reasoning.

An expression is shown.

$$\frac{5}{6}m + 12 - \frac{2}{3}m - 6$$

A student wrote the steps she used to determine an expression equivalent to the expression shown.

Step 1: $\frac{5}{6}m + 12 - \frac{2}{3}m - 6$

Step 2: $\frac{5}{6}m - \frac{2}{3}m + 12 - 6$

Step 3: $\left(\frac{5}{6}\right)\left(-\frac{2}{3}\right)m + 12 - 6$

Step 4: $-\frac{10}{18}m + 6$

- In which step did the student make her first error?
- Explain your response.
- Write the correct expression for this step.
- Explain your response.

Enter your answers and your explanations in the space provided.

Released Item

Math symbols
+ − × ÷
± − · /
= ≠ ⊟ ⬓
y^x √ ∛ x_i
π ( ) °
⊢⊣

▶ Relations

13.3: Near and Far From Zero

a	b	$-a$	$-4b$	$-a + b$	$a \div -b$	a^2	b^3
$-\frac{1}{2}$	6						
$\frac{1}{2}$	-6						
-6	$-\frac{1}{2}$						

1. For each set of values for a and b, evaluate the given expressions and record your answers in the table.

2. When $a = -\frac{1}{2}$ and $b = 6$, which expression:

   has the largest value?   has the smallest value?   is the closest to zero?

3. When $a = \frac{1}{2}$ and $b = -6$, which expression:

   has the largest value?   has the smallest value?   is the closest to zero?

4. When $a = -6$ and $b = -\frac{1}{2}$, which expression:

   has the largest value?   has the smallest value?   is the closest to zero?

Are you ready for more?

Are there any values could you use for a and b that would make all of these expressions have the same value? Explain your reasoning.

Curriculum

Type 3

Constructed response item requiring students to model with mathematics.

Released Item

8. In a hospital, the number of nurses is proportional to the number of patients. Different departments follow different rules for these proportions. The table shows the rules for a surgical department. The graph shows the rules for a newborn department.

Which department allows more patients per nurse? Explain.

Surgical Department

Number of Nurses	Number of Patients
1	4
2	8
3	12

Newborn Department

Number of Patients

Number of Nurses

Curriculum
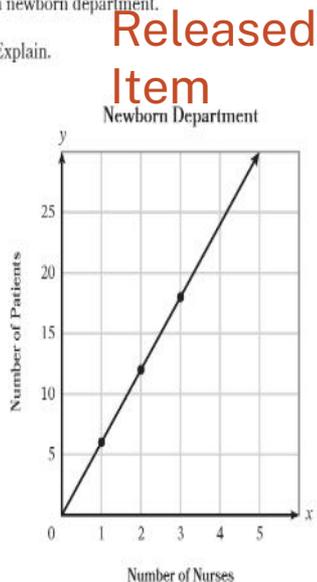
The equation $y = 0.5x$ represents the volume of water y that flows from faucet A in gallons x minutes after the faucet is turned on. The graph shows the relationship between time in minutes and volume of water that flows from faucet B in gallons.

Volume of Water (gallons)

Time (minutes)
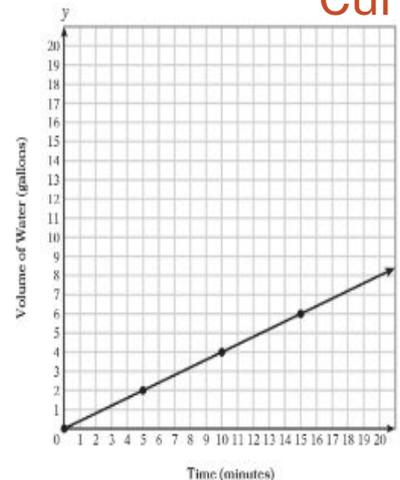
If you graphed both relationships, which line would be steeper? Explain.

Developing Writing in Mathematics

Modeling by the teacher

Student Discourse

Drafting

Revision

Final Draft

Action Steps

- Continue to focus on core instruction with high-quality materials.
  - Teach all grade-level content to all students.
  - Allow students to experience major, additional and supporting content, reasoning scenarios, and modeling tasks routinely.
- Continue to address unfinished learning through individualized acceleration.
- Engage students in three or more Zearn lessons per week.

PROFESSIONAL DEVELOPMENT

STANDARDS & CURRICULUM

ASSESSMENT
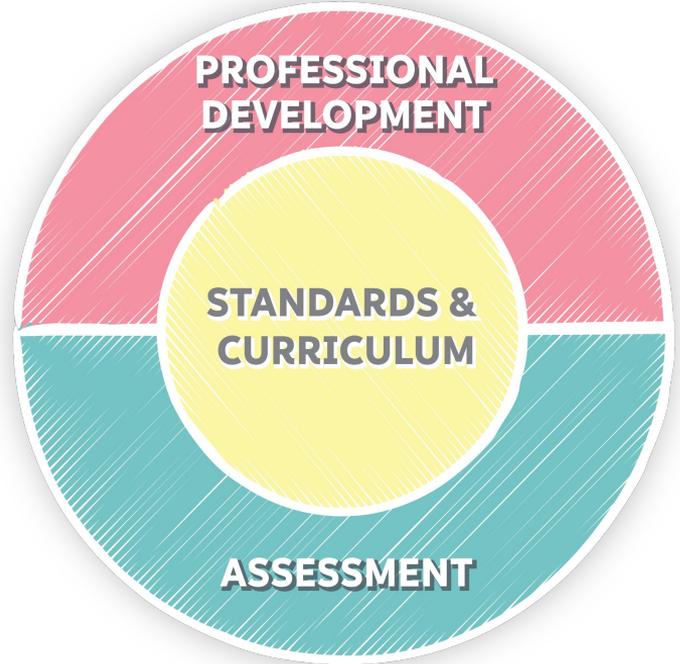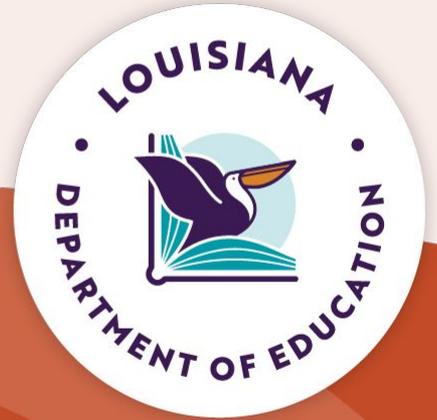
Literacy

Mission

Louisiana students will have improved literacy outcomes through high-quality instruction and interactions by an effective teacher who is supported by leaders and families.

PRIORITY ALIGNMENT
Provide the highest quality teaching and learning environment.

FOCUS AREA
· Literacy
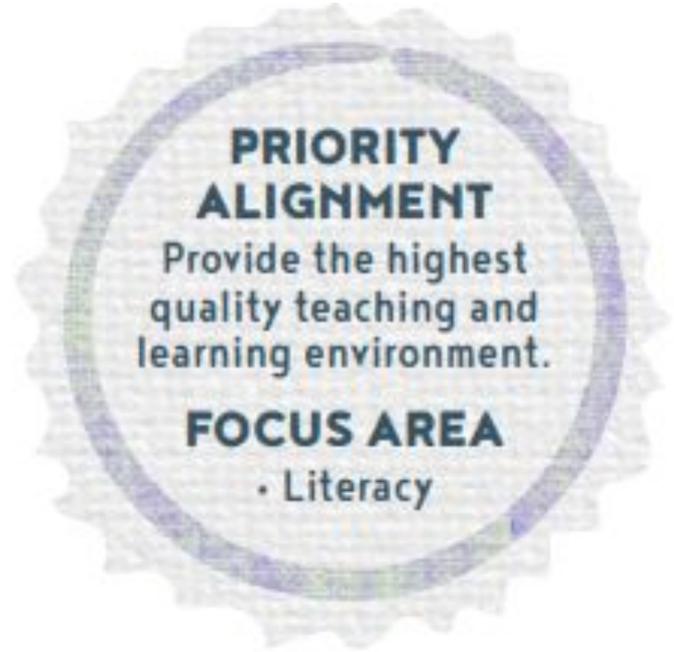
Student literacy outcomes will increase when schools create and monitor **LITERACY GOALS.**

Literacy outcomes will improve when students are provided high-quality core instruction together with **EXPLICIT LITERACY INTERVENTIONS AND EXTENSIONS** based on individual student needs.

ONGOING PROFESSIONAL GROWTH is an essential component of effective teaching and literacy development.

FAMILIES play an essential role in the literacy development of children at all ages and stages.

Literacy Screener Policy

Bulletin 741 - Louisiana Handbook for School Administrators - Addresses requirements outlined in R.S. 17:24.9 which include: administering the literacy screener three times per school year to each student in kindergarten through third grade (within the first thirty days, in December, and in April).

Parent Reporting:
- R.S. 17:24.10 requires reporting of results from Literacy Screeners to parents within 15 days of identifying students below grade level.
- Act 520 of 2022 updated R.S. 17:24.10 to include involving parents in the creation of Reading Improvement Plans for students in grades K-3 identified below level within 30 days of being identified below grade level.
- Use DIBELS Caregiver Report and Home Connect Report

Act 422: Third Grade Retention

Prohibits promotion to the fourth grade of certain students whose reading deficiencies have not been remediated by the end of the third grade.

- Literacy screening
- Individual reading plan
- Exceptions for good cause
- Required instructional services to retained students
- Begins 2024-2025 school year

Act 422: Third Grade Retention

Third grade students who have not met such an acceptable level of performance may be retained or promoted (good cause promotion); but in either case shall be provided with an **individual student literacy plan** that adheres to the following requirements:

- daily targeted small-group interventions
- before and after school literacy intervention provided by a teacher or tutor with specialized literacy training
- at-home literacy programs that include literacy workshops for the parents and legal guardians of students
- web-based or parent-guided home literacy activities

Take Action Now

- Review Middle of the Year data to determine areas of growth/decline
- Teacher Dialogue
- Ensure daily targeted small-group interventions and progress monitoring
- Promote Steve Carter Literacy Tutoring
- Prepare for summer learning opportunities

To Stay Informed

- Sign up for the Department's newsletters.
- Reference the monthly calls.
- Implement the tools found on the Louisiana Literacy and Math Refresh websites.
- Join us for this monthly webinar series on February 5, 2024.
- For questions, reach out to
  - STEM@la.gov or
  - louisianaliteracy@la.gov.