Foundational Lessons for Accelerating Math Education (FLAME)
Unit Assessments

Purpose

Foundational Lessons for Accelerating Math Education (FLAME) provides teachers with tools to build, track, and support the development of grade-level math fluency for students in grades K-5. Materials are organized into three units per grade level. Each unit provides teachers with various activities designed to support the development of the expected fluency skills at each grade level. Units also include guidance to help teachers identify students whose skills are fluent, progressing, or emerging. Each unit provides parent reports explaining how families can support their child's learning.

FLAME unit assessments provide opportunities for students to apply skills and fluency built throughout the use of FLAME lessons. These assessments also provide opportunities for students to explain their thinking and processes to give teachers a deeper understanding of the student's knowledge and more information to make informed decisions about next steps for the student. FLAME unit assessment items along with the formative assessments included in each unit, can be used to track students' progress toward fluency.

Teachers should anticipate that some of their students will need additional practice with the skills beyond what is provided through the activities. By using the data collected through daily formative assessments and unit assessments and growing understanding of fluency development, teachers have the power to ensure that their students will build grade-appropriate fluency skills.

Manipulatives

All students in kindergarten through Grade 1 should be allowed to use manipulatives on all FLAME unit assessments. Additionally, any student at any grade who has documented accommodations to use manipulatives should be allowed to use them on FLAME unit assessments. Beyond Grade 1, please see the rubric for the assigned question for guidance on manipulatives.
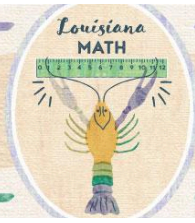
Scoring and Next Steps

If students score in the beginning range on any standard on the FLAME unit assessment please review FLAME activities for that standard with the students and readminister the FLAME unit assessment at the appropriate time for the student.

If you have additional questions or feedback on these assessments, please do not hesitate to contact the Louisiana Math team at STEM@la.gov.

Louisiana's Math Pillars

High-Quality, Grade-Level Math Instruction

Timely, Proactive Interventions

Ongoing Professional Learning

Families

FLAME Grade 3 Unit 2 Assessment
Teacher Answer Key

Item 1

Parker is a new farmer in Monroe. He goes out to purchase supplies for his farm and animals. Below is a list of the items he purchased.

Animal food: $162

Tractor: $557

Part A: How much does Parker pay for the supplies? Use models and numbers to explain your thinking.

Part B: If Parker had a coupon for $25 off his purchase, what would be his new amount? Use models and numbers to explain your thinking.

Standard: 3.NBT.A.2
Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.
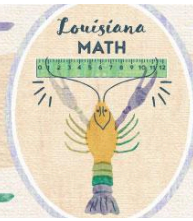
Sample Correct Drawings for Part A

Sample 1	Sample 2	Sample 3

Sample 2:

500 + 100 = 600

50 + 60 = 110

7 + 2 = 9

600 + 110 + 9 = 719

These __are not__ the only acceptable drawings. Any model showing the sum of 162 and 557 equaling 719 is considered correct.

Sample Correct Drawings for Part B

Sample 1	Sample 2

$$25 + 600 = 625$$

$$625 + 75 = 700$$

$$700 + 9 = 19 = 719$$

$$600 + 75 + 19 = \underline{694}$$

These <u>are not</u> the only acceptable drawings. Any model showing the difference of 719 and 25 equalling 694 is considered correct.

Rubric

Consistent - Student's performance demonstrates they are showing **consistent** understanding of the standard.
- The student accurately:
   - Answers both parts of the item correctly by adding and subtracting fluently

      AND
   - shows their work by using strategies and algorithms to verify their answer is reasonable. *The students' work MUST show clear evidence of their understanding and reasoning based on place value.*

Progressing - Student's performance demonstrates they are **progressing** toward understanding the standard.
- The student accurately:
   - Solves Part (a) and Part (b)

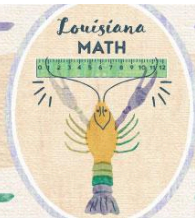   **BUT**
   - cannot justify the work they have completed or explain the steps and processes to their solution.

Beginning - Student's performance demonstrates that they are **beginning** to understand the standard.
- The student:
   - Is unable to answer the question correctly

      AND/OR
   - does not provide any reasoning to their solution method.

Item 2

Siyon was making pancakes for his family reunion. The table below shows the number of pancakes each box of mix creates.

Box(es)	Pancakes
1	6
2	12
3	18
4	24
5	30

Part A: How many pancakes would Siyon make if he made 7 boxes of mix? What pattern did you use to find your answer?

Part B: Can 55 be included in this pattern?

Use models and/or words to explain your thinking.
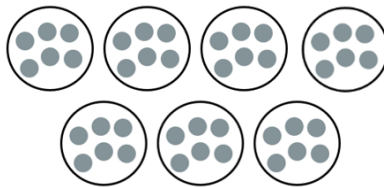
Standard: 3.OA.D.9
Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.
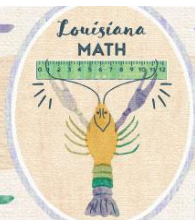
Sample Correct Drawings for Part A:

Sample 1

6, 12, 18, 24, 30, 36, 42
+6 +6 +6 +6 +6 +6

Sample 2

Sample 3

6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
6 x 6 = 36
6 x 7 = 42

Sample 4: He can make 42 pancakes. I know this because each box makes 6 pancakes, so 7 boxes would be 7 groups of 6 which is 42.

Sample Response for Part B: No, 55 cannot be in this pattern because it is not a multiple of 6.

*These <u>are not</u> the only acceptable drawings.

Rubric
Consistent - Student's performance demonstrates they are showing **consistent** understanding of the standard.
- The student accurately:
    - gives the correct amount of 42 pancakes in Part A
                                AND
    - explains the numbers in the pattern are calculated by continuously adding the starting number (6) to the prior sum
                                OR
    - explains the terms in the patterns are calculated by finding multiples of 6
                                AND
    - determines that 55 cannot go into the pattern because it is not a multiple of 6 in Part B
                                AND/OR
    - determines that 55 is odd, therefore it does not fit in the pattern.

Progressing - Student's performance demonstrates they are **progressing** toward understanding the standard.
- The student accurately:
    - finds the calculation of 42 pancakes in Part A
                                AND
    - determines 55 cannot be a number in this sequence
                                BUT
    - does not give an explanation for reasoning.

Beginning - Student's performance demonstrates that they are **beginning** to understand the standard.
- The student:
    - attempts to find and explain the pattern
                BUT
    - shows arithmetic errors in computation.
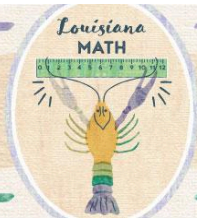
FLAME Grade 3 Unit 2 Assessment

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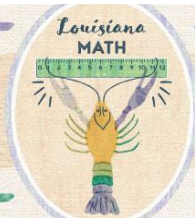
Animal food: $162

Tractor: $557

Part A: How much does Parker pay for the supplies? Use models and numbers to explain your thinking.

Answer: $ _____

Part B: If Parker had a coupon for $25 off his purchase, what would be his new amount? Use models and numbers to explain your thinking.

Answer: $ _____

 Draw a picture and write to explain your answers.

_____

_____

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_____

_____

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Item 2

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Part B: Can 55 be included in this pattern?

Use models and/or words to explain your thinking.

_____

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