Motivate. Engage. Inspire. Grow.

Learning Acceleration:

Sample Scope and Sequence for Tier I Instruction in Mathematics

2020 - 2021

Sample Scope and Sequence for Tier 1 Instruction in Mathematics

This resource provides a process for adjusting the curriculum's scope and sequence, as well as a sample adjusted pacing guide for Tier 1 instruction, based on unfinished learning due to COVID-19. It reflects a prioritization of current-year content as well as bridges to learning for grade-level content from the prior year in order to mitigate the disproportionate impact on our most instructionally vulnerable students and to accelerate learning for all. This document can be used when making adjustments to pacing guides and academic schedules.

4th Grade Math Sample Scope and Sequence Using *Go Math* Instructional Materials

Materials

- Math Units Quarter 1
- Student Achievement Partners: Instructional Content Guidance
- Achieve the Core Coherence Map
- Achieve the Core Focus Docs

Process

1. Inventory Instructional Days
2. Review 2019–20 Pacing Guide and eLearning Instruction
3. Utilize the Coherence Map
4. Identify Standards as Major Work, Supporting Work, or Additional Work
5. Prioritize Major Work from the Previous and Current Grade
6. Create a Pacing Guide Utilizing the District's Scope and Sequence
7. Consider Implications for Future Learning

Additional Considerations

1. Inventory Instructional Days

Start with the days available for instruction in SY 2020–21.

- After missing at least eight weeks of in-school instruction in school year 2019–20, there is an urgent need to minimize the loss of instructional days. Lessons on assessment days can be shortened, since schedules will need to be adjusted.
- Teachers and grade-level teams may send home additional learning for students in the form of work during school breaks/long weekends. Work can cover previously taught standards and provide a way to maximize students' learning and avoid "review

days" when returning from a break/long weekend. Teachers may choose to tailor this work to meet the needs of students who are instructionally vulnerable and to support families over school breaks/long weekends.

2. Review 19–20 Scope and Sequence/Pacing Guide and eLearning Instruction

Identify where in the 2019–20 pacing guide students left off before eLearning began. List the identified standards and lessons. Even if students had access to the identified content during eLearning, there may be gaps due to lack of access, trauma associated with the crisis, and other contributing factors that disproportionately impact students who are instructionally vulnerable.

3. Utilize the Coherence Map

Use Achieve the Core's Coherence Map to identify the connection between missed standards and current grade-level standards.

4. Identify Standards as Major Work, Supporting Work, or Additional Work

The table below shows an example of steps 2-4 for 3rd and 4th grade standards based on *Go Math* instructional materials.

Fourth Grade					
Grade 3 Standards Missed	Topic	Go Math Guidance Chapter/ Lessons	Grade Level Connection	Topic	Go Math Guidance Chapter/ Lessons
MAFS.3.MD.3.6 MAFS.3.MD.3.7 MAFS.3.MD.4.8	Area and Perimeter	Chapter 11.1-11.10	MAFS.4.MD.1.3	Area and Perimeter (using formulas)	Chapter 13
MAFS.3.G.1.1	Shapes and their Attributes	Chapter 12.1-12.8	MAFS.4.G.1.2	Classify Shapes by Properties of Lines and Angles	Chapter 10 Chapter 11
MAFS.3.NBT.1.2 *(fluency)*	Add and Subtract Within 1000	Chapter 1.1-1.12	MAFS.4.NBT.2.4	Addition and Subtraction	Chapter 1
MAFS.3 OA.3.7 *(fluency)*	Multiplication and Division	Chapter 4.1-4.10 Chapter 7.1-7.11	MAFS.4.NBT.2.5 MAFS.4.NBT.2.6	Two-digit Multiplication and Division	Chapter 2 Chapter 4

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5. Prioritize Major Work from the Previous and Current Grade

Major work from the previous grade should be used for just-in-time instruction as needed, not as a blanket review. Consult Student Achievement Partner's Priority Instructional Content Guidance and follow recommendations around content.

- In the example from the table above, a major standard in 3rd grade, MAFS.3.MD.3.7, was missed. The standard is important in order for students' future learning, and so it will be a top priority in the pacing guide, requiring several days of instruction. In contrast, MAFS.3.MD.4.8 is additional work in 3rd grade, so the standard will fit within the coherent MAFS.4.MD.1.3 lessons and not use full instructional days.

6. Create a Pacing Guide Utilizing the District's Scope and Sequence

- Make strategic lesson adjustments, dependent on the curriculum. Potential adjustments include:
  - *Replacing or combining lessons*
  - *Cutting or combining lessons based on the* Math Guidance Documents. The *Math Scope and Sequence* includes considerations for pacing. Implement suggestions from the Math Guidance Documents to provide time for just-in-time teaching.
- Access the entire Scope and Sequence for the grade level in the Elementary Learning Canvas Course. Only Quarter One is shown below for illustrative purposes.

Grade Four Math Units - Quarter One (41 days)		
Instructional Scope/Learning Targets	**Standards**	**Time Frame**
Prerequisite Skills Review and Assessment		3 days
Place Value and Operations with Whole Numbers **Place Value, Addition, and Subtraction to One Million (***Go Math! Ch. 1)*	**MAFS.4.NBT.1.1*** **MAFS.4.NBT.1.2** **MAFS.4.NBT.1.3** **MAFS.4.NBT.2.4** *(Fluency)*	16 days**
Multiply by 1-Digit Numbers *(Go Math! Ch. 2)*	**MAFS.4.OA.1.1** **MAFS.4.OA.1.a** **MAFS.4.OA.1.b** **MAFS.4.OA.1.2** **MAFS.4.NBT.2.5*** **MAFS.4.OA.1.3**	16 days**
Multiply 2-Digit Numbers *(Go Math! Ch. 3)*	**MAFS.4.NBT.2.5*** **MAFS.4.OA.1.3**	6 days & next quarter

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Fluency and Foundational Standards Mastery		
B.E.S.T. Benchmarks • Recall multiplication facts with factors up to 12 and related division facts with automaticity. • Identify the number that is one-tenth more, one-tenth less, one-hundredth more and one-hundredth less than a given number. • Explore addition and subtraction of multi-digit numbers with decimals to the hundredths. • Collect and represent numerical data, including fractional values, using tables, stem-and-leaf plots or line plots. • Solve problems involving rectangles with the same perimeter and different areas or with the same area and different perimeters. **Revisit grade-level standards that were NOT previously mastered and introduce new B.E.S.T Benchmarks prior to the Getting Ready for 5th Grade lessons.**	**MAFS.4.NBT.1.1*** **MAFS.4.NBT.2.4** *(Fluency)* **MAFS.4.NBT.2.5*** **MAFS.4.NBT.2.6*** **MAFS.4.NF.2.3*** **MA.4.NSO.2.1** **MA.4.NSO.2.6** **MA.4.NSO.2.7** **MA.4.DP.1.1** **MA.4.GR.2.2**	27 days

- Notes on the first week of school:
  - The first week of school is held for culture building, implementing trauma-informed practices, and rolling out routines and systems for students. Depending on the scenario, the first week of school will be a critical time to inform students and families about contingency plans and to train them on eLearning technology and systems across content. Prioritize students who are instructionally vulnerable during this time. Use this time to inventory students' access to devices and provide as needed.
    - Establish strong habits of discussion and mindsets around learning mathematics.
    - Assessments should begin after Labor Day.

7. Consider Implications for Future Learning

After finishing the pacing guide, take note of adjustments that will impact learning in SY 2021–22. The COVID-19 crisis has created a learning gap, and experience tells us it will be very difficult to completely close that gap in a single school year. It is important to look

ahead to ensure that the decisions made in SY 2020–21 do not create more gaps or harm students, with an emphasis on students who are instructionally vulnerable.

Implications for SY 2021–22 Pacing:
Major Work, Supporting Work, Additional Work

4th Grade Shortened Lesson and Standard	Future Standards Effected	Implications
MAFS.4.MD.1.1	MAFS.5.MD.1.1, MAFS.6.RP.A.1	Dedicate time in 5th grade to decrease impact on 6.RP understanding.
MAFS.4.MD.1.2	MAFS.5.MD.A.1, MAFS.5.NF.B.3, MAFS.5.NF.B.5, MAFS.5.NF.B.6	In lessons aligned to 5.NF standards, include connections between 4th- and 5th-grade content, and a detailed plan to provide students with opportunities to see those connections.
MAFS.4.G.1.1	N/A	N/A
MAFS.4.G.1.2	MAFS.5.G.2.3	Embed MAFS.4.G.A.2 connections in MAFS.5.G.B.3 lessons.
MAFS.4.G.1.3	N/A	N/A

Additional Considerations

Professional Development
Support teachers in understanding coherence across grades and the previous grade-level content that they will be expected to teach.

- To help teachers address the challenge of understanding multiple grade-levels' standards, encourage collaboration across grades, specifically to understand the rigor and common misconceptions of each standard that will need to be addressed. Helpful resources include the Louisiana Believes Teacher Companion Documents or the Tennessee Focus Documents. Note that while both of these resources are aligned to state-specific standards, they include valuable information.

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- Professional development should prioritize addressing the disproportionate impact on students who are instructionally vulnerable.

Below is an example of the standards internalization that teachers should do before teaching just-in-time lessons from previous grades.

3rd Grade Standard	Common Misconceptions
3.MD.3.7a: 3.MD.3.7b Conceptual Understanding, Procedural Skill and Fluency, Application	a) The most common misconception is not understanding the connection between counting individual tiles and the multiplication of side lengths. It may be helpful to separate the tiles visually to let students see them as groups of a given number or rows of a given number. This will help them connect the tiling to previous learning about the meaning of multiplying: adding equal groups a given number of times. b) Context often confuses students in this standard, especially if students are given the total area and asked to find one of the side lengths. Encourage students to draw visual models and label the given information to solve the problem. c) Not Missed d) A difficult part of this standard for students is identifying side lengths after decomposing the rectilinear figure into non-overlapping rectangles. For example, in the figure below, students may identify the side lengths of the non-overlapping rectangles as 8 ft by 6 ft and 3 ft by 8 ft because they see the opposite side of the 3 ft length is labeled 8 ft long. Encourage students to label known lengths and use their hands to cover parts of the figure to accurately see the side lengths.