Grade 2 Mathematics Priority Instructional Content for the 2020–21 School Year

The Mathematics Priority Instructional Content for the 2020–21 School Year (Mathematics Instructional Priorities) is designed to support decisions about how to elevate some of the most important mathematics at each grade level in the coming school year while reducing time and intensity for topics that are less integral to the overall coherence of college- and career-ready standards.

At each grade level from kindergarten through grade 8, the Mathematics Instructional Priorities name the grade-level mathematics that is of highest priority at each grade; provide a framework for strategically drawing in prior grade-level content that has been identified as essential for supporting students' engagement with the most important grade-level work; and suggest ways to reduce or sometimes eliminate topics in a way that minimizes the impact to overall coherence. In using this guidance, decision makers should thoughtfully consider in their unique context the likely implications of the spring 2020 disruption as decisions are made to select supports to ensure that students are able to successfully engage with the grade-level content. Decision makers should also bear in mind that while this document articulates content priorities, elevating the Standards for Mathematical Practice in connection with grade-level content is always a priority.

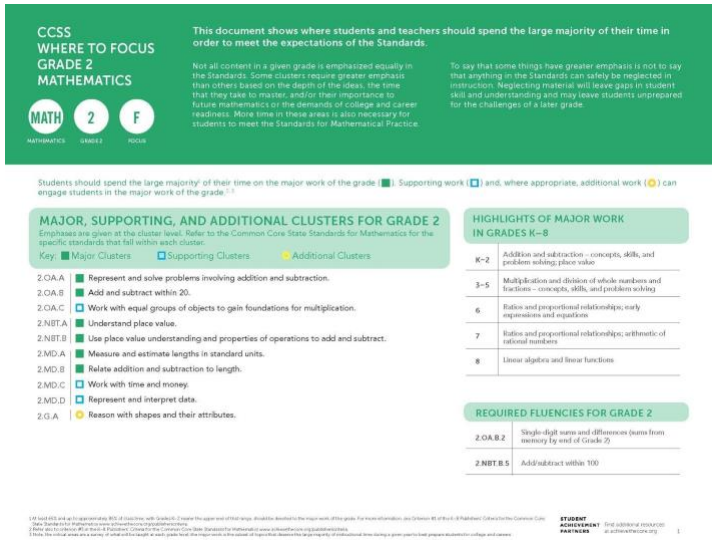
At each grade level, recommendations are provided for facilitating social, emotional, and academic development (SEAD) in mathematics. These recommendations stress themes of discourse, belonging, agency, and identity and can either be applied across grades (even if only listed in one) or they can be modified to fit different grades. These themes of discourse, belonging, agency, and identity are integral to the Standards of Mathematical Practice and the language in the recommendations reflects this connection.

The 2020–21 school year presents a unique set of opportunities and challenges due to the disruption to instruction in spring 2020 as well as the uncertainty associated with the 2020–2021 school year. The Mathematics Instructional Priorities are provided in response to these conditions. They are not criteria, and they do not revise the standards. Rather, they are potential ways, and not the only ways possible, to help students engage deeply with grade-level mathematics in the 2020–21 school year.

The Mathematics Instructional Priorities do not stand alone but are to be used in conjunction with college- and career-ready standards. One reason for this is that codes such as 2.OA.A must be traced back to the standards in order to see the language to which they refer. The Mathematics Instructional Priorities do not reiterate what the standards already say—even in cases where the specific language of a standard is fundamentally important to a high-quality aligned curriculum. Nor do the Mathematics Instructional Priorities mention every opportunity the standards afford to make coherent connections within a grade or between one grade and another—again, even when those connections are fundamentally important and are the basis for the guidance given. Therefore, the Mathematics Instructional Priorities will be used most powerfully in cross-grade collaboration among educators who know the standards well and can use existing resources such as the *Progressions* documents and other resources listed in the Appendix.

While the grade-level guidance isn't specific to any math program or set of programs, an examination of a selection of curriculum scope and sequence documents informed the recommendations, especially recommendations about when and how to integrate prior-grade concepts into the current grade. The guidance does not list all possible prior-grade content relevant to the current grade, but instead concentrates the recommendations on the most critical prior-grade connections, with greater emphasis on that content which was likely taught during the last third of the 2019-20 school year based on the scope and sequence analysis.

Where to focus Grade 2 Mathematics?



CCSS WHERE TO FOCUS GRADE 2 MATHEMATICS

MATH 2 F

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the Standards.

Not all content in a given grade is emphasized equally in the Standards. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas is also necessary for students to meet the Standards for Mathematical Practice.

To say that some things have greater emphasis is not to say that anything in the Standards can safely be neglected in instruction. Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade.

Students should spend the large majority[1] of their time on the major work of the grade (■). Supporting work (□) and, where appropriate, additional work (○) can engage students in the major work of the grade.[2,3]

MAJOR, SUPPORTING, AND ADDITIONAL CLUSTERS FOR GRADE 2

Emphases are given at the cluster level. Refer to the Common Core State Standards for Mathematics for the specific standards that fall within each cluster.

Key: ■ Major Clusters □ Supporting Clusters ○ Additional Clusters

2.OA.A	■ Represent and solve problems involving addition and subtraction.
2.OA.B	■ Add and subtract within 20.
2.OA.C	□ Work with equal groups of objects to gain foundations for multiplication.
2.NBT.A	■ Understand place value.
2.NBT.B	■ Use place value understanding and properties of operations to add and subtract.
2.MD.A	■ Measure and estimate lengths in standard units.
2.MD.B	■ Relate addition and subtraction to length.
2.MD.C	□ Work with time and money.
2.MD.D	□ Represent and interpret data.
2.G.A	○ Reason with shapes and their attributes.

HIGHLIGHTS OF MAJOR WORK IN GRADES K–8

K–2	Addition and subtraction – concepts, skills, and problem solving; place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra and linear functions

REQUIRED FLUENCIES FOR GRADE 2

2.OA.B.2	Single-digit sums and differences (sums from memory by end of Grade 2)
2.NBT.B.5	Add/subtract within 100

[1] And 65% and up to approximately 85% of class time, with Grades K–2 near the upper end of that range. (Available detailed in the major work of the grade. For more information, see Criterion #5 of the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics www.achievethecore.org/publishercriteria.)

[2] Refer also to evidence #5 in the K–8 Publishers' Criteria for the Common Core State Standards for Mathematics at www.achievethecore.org/publishercriteria.

[3] Note: the critical areas are a survey of what will be taught at each grade level; the major work is the subset of topics that deserve the large majority of instructional time during a given year to best prepare students for college and career.

STUDENT ACHIEVEMENT PARTNERS find additional resources at achievethecore.org

College- and career-ready mathematics standards have important emphases at each grade level, which for grade 2 are highlighted in this Focus Document. The considerations for the 2020-21 school year that follow are intended to be a companion to the Focus Document. Users should have both documents in hand, as well as a copy of grade-level standards, when considering these recommendations.

For the 2020-21 school year, prioritization of grade-level mathematical concepts combined with some incorporation of prior-grade knowledge and skills will be essential to support all students in meeting grade-level expectations. For these unique times, Student Achievement Partners has developed additional guidance above and beyond what is communicated through the major work designations. As described at greater length on the previous page, the following tables:

- Name priority instructional content at each grade;
- Provide considerations for addressing grade-level content in a coherent way;
- Articulate selected content from the prior grade that may be needed to support students in fully engaging with grade-level mathematics;
- Suggest where adaptations can be made to allow for additional time on the most important topics; and
- Provide suggestions for ways to promote social, emotional, and academic development (SEAD) in grade-level mathematics learning, often through the Standards for Mathematical Practice.

The considerations repeatedly use several verbs, such as *combine*, *integrate*, etc. The verbs most commonly used in the considerations are italicized below and defined in a glossary in the Appendix. Note that content is designated at the cluster level when the guidance refers to the cluster and its standards, and at the standard level in cases where guidance varies within a cluster.

Considerations for Addressing PRIORITY Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for grade 2. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
2.OA.A	*Emphasize* problems that involve sums less than or equal to 20 and/or the related differences to keep the focus on making sense of different problem types; assign fewer problems with sums greater than 20 or related differences.
2.OA.B	*Incorporate* additional practice on the grade 1 fluency of adding and subtracting within 10 (1.OA.C.6) early in the school year to support the addition and subtraction work of grade 2 (2.OA).
2.NBT.B	*Prioritize* strategies based on place value in written work to strengthen the progression toward fluency with multi-digit addition and subtraction. (Note that grade 2 students are not expected to be fluent with three-digit sums and differences; repetitive fluency exercises are not required.) *Incorporate* foundational work on addition and subtraction within 100 from grade 1 (1.NBT.C) to support the addition and subtraction work of grade 2.
2.MD.B.5	Ensure word problems represent all grade 2 problem types, and refer to guidance for 2.OA.A.
2.MD.B.6	No special considerations for curricula well aligned to representing lengths on number line diagrams, as detailed in this standard. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing REMAINING Grade-Level Content	
The clusters and standards listed in this table represent the remainder of grade 2 grade-level content. The right-hand column contains approaches to shifting how time is dedicated to the clusters and standards in the left-hand column.	
Clusters/Standards	**Considerations**
2.OA.C	*Eliminate* lessons on foundations for multiplication.
2.NBT.A*	*Emphasize* the conceptual understanding of three-digit numbers (as detailed in 2.NBT.A.1). *Integrate* lessons and practice on counting, reading/writing, and comparing numbers (2.NBT.A.2, 3, and 4) into the work of place value. *Limit* the amount of required student practice on counting by ones, reading/writing, and comparing numbers.
2.MD.A*	*Integrate* lessons and practice on comparing and estimating lengths (2.MD.A.2, 3, and 4) into the work of measuring length with tools (2.MD.A.1) in order to reduce the amount of time spent on this cluster. *Limit* the amount of required student practice.
2.MD.C	*Combine* lessons in order to reduce the amount of time spent on time and money. *Emphasize* denominations that support place value understanding such as penny-dime-dollar. *Limit* the amount of required student practice.
2.MD.D	*Eliminate* lessons on generating measurement data (2.MD.D.9) and creating picture/bar graphs (2.MD.D.10). *Integrate* data displays only as settings for addition/subtraction word problems (2.OA.A).
2.G.A	*Combine* lessons to address key concepts on reasoning with shapes and their attributes in order to reduce the amount of time spent on this cluster. *Limit* the amount of required student practice.

**While these clusters are Major Work of the Grade, during the 2020–21 school year, it is recommended that they receive lighter treatment in favor of other priority instructional content.*

Facilitate Social, Emotional, and Academic Development (SEAD)[11] Through Grade-Level Content	
The left-hand column contains sample actions for how SEAD can be effectively integrated into grade-level mathematics instruction, in connection with Standards for Mathematical Practice named in the right-hand column. Efforts should be made to facilitate SEAD even in remote learning environments, using synchronous and asynchronous approaches and the capabilities afforded by remote learning technologies.	
Sample Actions	**Connection to Standards for Mathematical Practice (SMP)**
Use discussion protocols to provide a safe environment for students to share their developing thinking and to allow for interactions where peers value multiple contributions.	MP3: Construct viable arguments and critique the reasoning of others.
Design question threads that prompt students to recognize frustration with a problem, manage the frustration without turning their back on the task, re-evaluate, and look for an alternate pathway to a solution.	MP1: Make sense of problems and persevere in solving them.
Empower students to self-monitor their individual progress as they use properties and patterns along the way toward knowing sums of two one-digit numbers from memory. This monitoring includes reflection and individual recording, supporting their ability to try and try again to show off their improvement.	MP8: Look for and express regularity in repeated reasoning.

[11] Sample SEAD actions contribute to students' sense of belonging and safety, efficacy, value for effort and growth, as well as a sense of engagement in work that is relevant and culturally responsive. The actions can be modified to fit any grade, K–8, by considering the content of that grade level. See other grade-level Mathematics Instructional Priorities documents for additional samples.