

Kindergarten Mathematics Considerations from Achieve the Core/CCSSO

2020–21 Priority Instructional Content in English Language Arts/Literacy and Mathematics

Kindergarten 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 K.CC.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 Kindergarten Mathematics?

College- and career-ready mathematics standards have important emphases at each grade level, which for kindergarten 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 <u>PRIORITY</u> Grade-Level Content	
The clusters and standards listed in this table name the priority instructional content for kindergarten. 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
K.CC.A K.CC.B K.CC.C	No special considerations for curricula well aligned to knowing number names, counting, and comparing numbers, as detailed in these clusters. Time spent on instruction and practice should NOT be reduced.
K.OA.A	No special considerations for curricula well aligned to understanding addition and subtraction, as detailed in this cluster. Time spent on instruction and practice should NOT be reduced.

Considerations for Addressing <u>REMAINING</u> Grade-Level Content	
The clusters and standards listed in this table represent the remainder of kindergarten 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
K.NBT.A*	<i>Combine</i> lessons on numbers 11–19 to address key concepts in order to reduce the amount of time spent on this cluster. <i>Limit</i> the amount of required student practice.
K.MD.A	<i>Combine</i> lessons on describing and comparing measurable attributes to address key concepts across this cluster in order to reduce the amount of time spent on this cluster. <i>Limit</i> the amount of required student practice. (Note that standards in K.MD.A do not require use of measuring devices or measurement units.)

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K.MD.B	<i>Integrate</i> classifying and counting objects (K.MD.B) with other counting and comparison work in the grade (K.CC.A, B, and C) in order to reduce the amount of time spent on this cluster.
K.G.A K.G.B	<i>Combine</i> lessons on identifying, describing, analyzing, comparing, and composing shapes to address key concepts across the clusters in this domain in order to reduce the amount of time spent on this cluster.

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

Facilitate <u>Social, Emotional, and Academic Development (SEAD)</u>⁹ 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)
Design structured and unstructured time for students to actively collaborate with their classmates to grow their skills in problem solving, cooperation, communication, innovation, reflection, self-regulation, and empathy (for example, when students are in math centers or when they share tasks such as counting out supplies).	MP1: Make sense of problems and persevere in solving them.
Promote a sense of belonging by including math routines, such as number talks, choral counting, counting collections, and other counting routines, so that students see themselves as a part of a community.	MP7: Look for and make use of structure.
Promote skills in cooperation and communication by providing opportunities in daily lessons for students to work in pairs counting objects and practicing fluency within 5.	MP6: Attend to precision.

⁹ 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.

See Complete K-8 Documents here:

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https://achievethecore.org/content/upload/2020%E2%80%9321%20Priority%20Instructional%20Content%20in%20ELA%20Literacy%20and%20Mathematics_June%202020.pdf

Math Important prerequisite skills list from CCSSO:

https://docs.google.com/document/d/1mcApF1n7sPI7Xsrlx29Ab_tmAAvne4A-VuJKSWb_qSg/edit