

# NC Check-Ins Mathematics

## Grades 3–8 Test Specifications

### NC Check-Ins Overview and Purpose

NC Check-Ins are interim assessments aligned to North Carolina grade-level content standards in mathematics for grades 3–8 developed by the North Carolina Department of Public Instruction (NCDPI). There are three NC Check-Ins at each grade level administered after approximately nine weeks of instruction (NC Check-In 1, October; NC Check-In 2, January; NC Check-In 3, March). For mathematics, each NC Check-In focuses on a selected sub-set of grade-level content standards.

The main purpose of NC Check-Ins is to provide students, teachers, parents, and stakeholders with immediate in-depth action-data and a reliable estimate of students' current performance on the selected sub-set of content standards. A secondary purpose is derived from NC Check-Ins strong relationship with grade level end-of-grade (EOG) summative assessments. Both EOGs and NC Check-Ins share a common item bank, and performance on the NC Check-Ins serve as an early indicator of a student's level of preparedness for the EOG summative assessment.

The NCDPI does not have validity evidence to support using results from NC Check-Ins as a predictor of student performance on the EOG summative assessment. Even though there is evidence of a significant correlation between scores from NC Check-Ins and EOGs, this correlation evidence by itself does not signify prediction. The overall value of NC Check-Ins is the use of in-depth action-data for formative purposes throughout the year to help students and teachers adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes.

### Prioritization of Standards

- The NC Check-Ins are aligned to the NC Standard Course of Study (NCSCS) for Mathematics, adopted by the North Carolina State Board of Education in June 2017
- The NCSCS may be reviewed by visiting the NCDPI/K–12 Standards, Curriculum, and Instruction for Mathematics webpage at <http://www.dpi.state.nc.us/curriculum/mathematics/>.
- Assessment specifications meetings were held in April 2018. The NCDPI/Test Development Section collaborated with a panel of North Carolina teachers and educators to develop recommendations for the content standards to be assessed. For each recommended content standard, panelists provided input on the relative importance of the standard, the anticipated instructional time for the standard, and the appropriateness of the standard for different question types.
- The following Content specifications are for test development purposes only and are not presented as a mandated pacing guide. The delivery of curriculum and instruction is a local decision; therefore, it is the expectation that some schools will not have covered all areas in all standards assessed in any one NC Check-In by the time the administration window closes.
- Data from content standards that have not been taught should be used as pre-test data.

<b>GRADE 3 MATHEMATICS</b>		
<b>NC Check-In 1 Assessed Standards</b>	<b>NC Check-In 2 Assessed Standards</b>	<b>NC Check-In 3 Assessed Standards</b>
3.MD.3	3.NBT.3	3.G.1
3.NBT.2	3.OA.2	3.MD.7
3.OA.1*	3.OA.3	3.NF.2
3.OA.3†	3.OA.6	3.NF.3
3.OA.8‡	3.OA.8	3.NF.4

\* 3.OA.1 will focus on the entire standard except decomposing a factor and the associative property of multiplication.

† 3.OA.3 will focus on multiplication.

‡ 3.OA.8 will focus on addition and subtraction.

<b>GRADE 4 MATHEMATICS</b>		
<b>NC Check-In 1 Assessed Standards</b>	<b>NC Check-In 2 Assessed Standards</b>	<b>NC Check-In 3 Assessed Standards</b>
4.MD.3*	4.NBT.2	4.NF.2
4.MD.4	4.NBT.4	4.NF.3
4.OA.1	4.NBT.5	4.NF.4
4.OA.3†	4.NBT.6	4.NF.6
4.OA.4	4.NBT.7	4.NF.7

\* 4.MD.3 will focus on the entire standard except applying the area and perimeter formulas in real world and mathematical problems.

† 4.OA.3 will focus on the entire standard except remainders.

<b>GRADE 5 MATHEMATICS</b>		
<b>NC Check-In 1 Assessed Standards</b>	<b>NC Check-In 2 Assessed Standards</b>	<b>NC Check-In 3 Assessed Standards</b>
5.MD.2	5.NBT.3	5.NBT.5
5.MD.5	5.NBT.7*	5.NBT.6
5.OA.2	5.NF.3	5.NBT.7
5.OA.3	5.NF.7	5.NF.1
		5.NF.4

\* 5.NBT.7 will focus on addition and subtraction.

<b>GRADE 6 MATHEMATICS</b>		
<b>NC Check-In 1 Assessed Standards</b>	<b>NC Check-In 2 Assessed Standards</b>	<b>NC Check-In 3 Assessed Standards</b>
6.G.1	6.EE.1	6.EE.7
6.G.4	6.NS.1	6.EE.8
6.NS.4	6.NS.2	6.EE.9
6.RP.1	6.NS.3	6.G.3
6.RP.3*	6.RP.4	6.NS.9

\*6.RP.3 will also incorporate skills presented in standard 6.RP.2.

<b>GRADE 7 MATHEMATICS</b>		
<b>NC Check-In 1 Assessed Standards</b>	<b>NC Check-In 2 Assessed Standards</b>	<b>NC Check-In 3 Assessed Standards</b>
7.G.1	7.EE.1	7.EE.3
7.NS.3*	7.NS.3	7.EE.4
7.RP.1	7.RP.2	7.G.4
7.RP.2	7.SP.7	7.G.5
7.RP.3	7.SP.8	7.G.6

\* 7.NS.3 will also incorporate skills presented in standard 7.NS.2.

<b>GRADE 8 MATHEMATICS</b>		
<b>NC Check-In 1 Assessed Standards</b>	<b>NC Check-In 2 Assessed Standards</b>	<b>NC Check-In 3 Assessed Standards</b>
8.EE.7	8.EE.8	8.F.2
	8.F.1	8.F.5
8.G.3*	8.F.3	8.SP.1
	8.F.4	8.SP.2
8.G.5		8.SP.3

\* 8.G.3 will also incorporate skills presented in standards 8.G.2 and 8.G.4.

## **Test Format**

All NC Check-Ins are available in both paper-and-pencil and online administration modes and will consist of 25 items. All 25 items for NC Check-Ins at grade 3 and 4 are four-response multiple-choice items. NC Check-Ins for grades 5–8 will have a combination of four-response multiple-choice items and gridded response item types. Each question is worth one point.

## **Administration**

The NCDPI offers three NC Check-Ins per grade level within a school year. Participation in any NC Check-In is entirely voluntary. Each NC Check-In administration has a pre-defined test window set by the NCDPI. The NCDPI may adjust the testing window within a school year to accommodate for unanticipated circumstances such as inclement weather. Schools are given the flexibility to schedule the administration of NC Check-Ins at any time during a designated window. Proctors are not recommended for the administration of an NC Check-Ins. NC Check-Ins are not timed assessments. However, the recommended time for most students to complete a 25 item NC Check-Ins is about 90 minutes. It is a local decision to allow students more time to work on the assessment.

## **Student Reviews, Scores, and Reports**

Within five days of administering an NC Check-In and submitting student responses, school administrators and teachers will have access to student, class, and school-level custom reports generated by NCDPI custom scoring and reporting software. Teachers also have access to students' test books (for paper-and-pencil administrations) or an electronic copy of the NC Check-In (for online administration) for up to five (5) weeks beyond the close of the testing window to use for review sessions with students. These reports provide a summary of performance expressed as number and percent of items answered correctly disaggregated by student, classroom, and school by standard assessed. These reports are intended to support formative uses at the classroom and school level.

Summative interpretation of scores comparing performance of schools across local education agencies (LEAs) is highly discouraged because schools are not assumed to be following the same pacing or curriculum. All schools are not expected to have completed the entire scope for all standards assessed in a NC Check-In prior to the administration because delivery of curriculum is a local decision.

At the end of each NC Check-In window, the NCDPI produces a state aggregate report with the summary of percent correct by items grouped by standard. The purpose of this report is to provide a reference on the empirical difficulty of items administered in the NC Check-In.