NC Check-Ins 2.0
Science Grades 5 and 8 Specifications

Purpose and Overview

The NC Check-Ins 2.0 for science grades 5 and 8 are the through-year interim component of the North Carolina Personalized Assessment Tool (NCPAT). The primary purpose is to provide educators, students, and stakeholders with immediate and detailed feedback on student performance on grade-level-specific content objectives to inform instruction for individual student's needs.

Also, data from NC Check-Ins 2.0 are used for routing determination into the summative multistage component of NCPAT as a reliable estimate to inform a student's end-of-grade (EOG) assessment experience and improve precision/reliability of reported achievement levels.

NC Check-Ins 2.0 interim assessments are developed by North Carolina Department of Public Instruction (NCDPI) and are aligned to the North Carolina Standard Course of Study (NCSCOS) for science grades 5 and 8. There are three science NC Check-Ins 2.0 at each grade level. Each science NC Check-Ins 2.0 focuses on a domain of the NCSCOS for science at grades 5 and 8: Physical Science (PS), Earth and Space Science (ESS), and Life Science (LS). All NC-Check-Ins 2.0 interim assessments are available to Public School Units (PSU) on a voluntary basis.

Content Specifications

The following content specifications are for test development purposes only and are not presented as a pacing or curriculum recommendation. The delivery of curriculum and instruction is a local decision. It is the expectation that Disciplinary Core Ideas (DCI) objectives within a domain may not always be taught in isolation; some schools may not have covered all objectives assessed in any one NC Check-Ins 2.0. The Science and Engineering Practices (SEPs) adopted as part of the science content standards are expected to support a greater emphasis on how students develop and engage with science knowledge.

Items on the NC Check-Ins 2.0 are either aligned to a DCI objective only or a combination of a DCI objective and an SEP. The pairings of DCIs and SEPs are random, and it is possible all items that appear on an NC Check-Ins 2.0 might not represent the exhaustive combination of potential DCI and SEP mappings. The content blueprint shows the list of DCI objectives for each NC Check-Ins 2.0 and a subset of SEPs that can be reliably assessed given the test format. The SEPs assessed are divided into higher and lower frequency

categories. For items aligned to a DCI and SEP combination, it will be most likely that the SEP will be from the higher frequency category.

Schools are advised to use their professional judgement in deciding the most appropriate time within the available window to administer each NC Check-Ins 2.0 interim that will yield the most valuable feedback to support students and instruction.

The NCSCOS for science may be reviewed by visiting the NCDPI/Academic Standards for science webpage.

Table 1. Content specifications NC Check-Ins 2.0 Science Grade 5.

Interim Name	Domain	Assessed Objectives	Science and Engineering Practices (SEPs) (Commonly Assessed)
NC Check-Ins 2.0 A	Physical Science (PS)	• PS.5.1.1 • PS.5.1.2 • PS.5.1.3 • PS.5.2.1 • PS.5.2.2	<u>Higher Frequency</u> • Construct an Explanation • Analyze and Interpret Data • Use Models • Use Mathematical and Computational Thinking <u>Lower Frequency</u> • Ask Questions • Carry Out an Investigation • Engage in Argument from Evidence
NC Check-Ins 2.0 B	Life Science (LS)	• LS.5.1.1 • LS.5.1.2 • LS.5.2.1 • LS.5.2.2 • LS.5.2.3 • LS.5.3.1 • LS.5.3.2	<u>Higher Frequency</u> • Construct an Explanation • Analyze and Interpret Data • Use Models • Use Mathematical and Computational Thinking <u>Lower Frequency</u> • Ask Questions • Carry Out an Investigation • Engage in Argument from Evidence
NC Check-Ins 2.0 C	Earth and Space Science (ESS)	• ESS.5.1.1 • ESS.5.1.2 • ESS.5.1.3 • ESS.5.1.4	<u>Higher Frequency</u> • Construct an Explanation • Analyze and Interpret Data • Use Models • Use Mathematical and Computational Thinking <u>Lower Frequency</u> • Ask Questions • Carry Out an Investigation • Engage in Argument from Evidence

Table 2. Content specifications for NC Check-Ins 2.0 Science Grade 8.

Interim Name	Domain	Assessed Objectives	Science and Engineering Practices (SEPs) (Commonly Assessed)
NC Check-Ins 2.0 A	Physical Science (PS)	• PS.8.1.1 • PS.8.1.2 • PS.8.1.3 • PS.8.1.4 • PS.8.1.5	Higher Frequency • Analyze and Interpret Data • Use Models • Construct an Explanation Lower Frequency • Engage in Argument from Evidence • Carry Out an Investigation
NC Check-Ins 2.0 B	Life Science (LS)	• LS.8.1.1 • LS.8.1.2 • LS.8.2.1 • LS.8.2.2 • LS.8.2.3 • LS.8.2.4 • LS.8.3.1 • LS.8.3.2	Higher Frequency • Analyze and Interpret Data • Use Models • Construct an Explanation Lower Frequency • Engage in Argument from Evidence • Carry Out an Investigation
NC Check-Ins 2.0 C	Earth and Space Science (ESS)	• ESS.8.1.1 • ESS.8.1.2 • ESS.8.2.1 • ESS.8.2.2 • ESS.8.3.1 • ESS.8.3.2 • ESS.8.4.1 • ESS.8.4.2 • ESS.8.4.3 • ESS.8.4.4	Higher Frequency • Analyze and Interpret Data • Use Models • Construct an Explanation Lower Frequency • Engage in Argument from Evidence • Carry Out an Investigation

NC Check-Ins 2.0 Format

The NC Check-Ins 2.0 are interim assessments administered online via the NCTest platform unless a paper format is required for students with a documented accessibility need. Each interim assessment is made up of twenty-five questions; question types include four-response-option multiple-choice and technology-enhanced item types presented as standalone items or as part of an item set. For items presented as part of an item set,

students will be provided reference material associated to all questions in the item set.

Administration and Review

To accommodate local control of curriculum, the NCDPI will offer a flexible administration and review window for all interims that will open the third week of September to the end of May. Public school units (PSUs) may choose to administer interims in the order that best aligns with their curriculum. Each NC Science Check-Ins 2.0 should only be given once within any given year.

Proctors are not recommended for the administration of interims. The interims are not timed; however, the estimated time for most students to complete an interim is about ninety minutes. Schools have the option to administer the interims in one school day or over multiple school days. For multiple school days, the total administration time can be divided into mini sessions.

The interim item-review window for teachers will also be available from the third week of September to the end of May. Teachers may access interim forms after administration so they can conduct formative reviews with their students. The main purpose of these interims is to provide reliable formative data on course-level-specific content objectives so teachers may adjust instruction. Previewing or disclosing interim content to students before an administration may result in unreliable score with serious validity concerns about inferences of student performance on course-level-specific content objectives.

Supplemental Materials and Additional Resources

Online test read aloud in English is available as a designated feature to assist with the reading load of the science test items. The online read aloud is computer-generated modulation, not human vocalizations. Students do not need an individualized education plan (IEP) to qualify. The teacher will have to approve the read aloud designated feature for students prior to testing. It is recommended students have routine access to such technology during regular classroom instruction.

For the Grade 8 NC Check-Ins 2.0 Physical Science, an online version of the periodic table will be available in NCTest. Students can also request to have an optional paper version. A sample is available on the EOG webpage.

The NCTest tutorial page has been updated to include science item set practice. These practice questions are not included in the Online Assessment Tutorial requirement and may be accessed via https://go.ncdpi.gov/NCTest.