



NCEXTEND1 Science at Grades 5 and 8 Alternate Assessments North Carolina Assessment Specifications

Purpose of the Assessments

- The NCEXTEND1 Science alternate assessments at Grades 5 and 8 students' proficiency on the [North Carolina Extended Content Standards for Science](#) adopted by the North Carolina State Board of Education in February 2011.
- Assessment results will be used for school accountability under the accountability model and for federal reporting purposes.

Curriculum Cycle

- February 2011: North Carolina State Board of Education adoption of the [North Carolina Extended Content Standards for Science](#)
- 2018–2019: Items developed and field-tested for the NCEXTEND1 Science Alternate Assessments
- 2019–2020: First operational administration of NCEXTEND1 Science Alternate Assessments (Edition 4)

Standards

- The [North Carolina Extended Content Standards for Science](#) at [Grades 5](#) and [8](#) include content from the three branches of science: Life Science, Earth and Environmental Science, and Physical Science.

Developing Assessments

- North Carolina educators were recruited and trained to write new items. The diversity among the item writers and their knowledge of the current standards was addressed during recruitment. Trained North Carolina educators also review items and suggest improvements, if necessary. The use of North Carolina educators to develop and review items strengthens the content validity of the items.
- For an in-depth explanation of the test development process see State Board Policy [Multiple-Choice Test Development](#) (TEST-013) or reference the [Test Development Process: Item, Selection, and Form Development document](#).

Prioritization of Standards

- Members of the North Carolina Department of Public Instruction (NCDPI)/Test Development Section invited North Carolina educators to collaborate and develop recommendations for a prioritization of standards indicating the relative importance of each standard, the anticipated instructional time, and the appropriateness of the standard for test design.
- Subsequently, Standards, Curriculum and Instruction and test development staff from the NCDPI met to review the recommendations from the teacher panels and to adopt final weight distributions across the domains for each grade level.

- Some content standards in the Extended Content Standards will not be directly assessed in the assessments because either (1) the standard cannot be appropriately assessed during a limited time assessment using multiple-choice or (2) the standard is better assessed through another, more inclusive standard.
- *Table 1* describes the range of items by domain that will appear on the NCEXTEND1 Science at Grades 5 and 8 Alternate Assessment (Edition 4).

Table 1: NCEXTEND1 Science Grades 5 and 8 Domain Distribution

Domain	Grade 5	Grade 8
Life Science: Structures and Functions of Living Organisms	24–32%	24–32%
Life Science: Ecosystems	24–32%	24–32%
Earth and Environmental Science: Earth Systems, Structures, and Processes	16–24%	24–32%
Physical Science: Forces and Motion	8–16%	4–12%
Physical Science: Matter, Properties, and Change	8–16%	8–16%
Total	100%	100%

Cognitive Rigor and Item Complexity

- Items for the NCEXTEND1 Science at Grades 5 and 8 Alternate Assessments have been designed, developed, and classified to ensure that the cognitive rigor of the operational test forms align to the cognitive complexity and demands of the [NC Extended Content Standards for Science](#). These items will require students to not only recall information, but also apply concepts and skills and make decisions.

Testing Structure and Administration

- For the NCEXTEND1 Science at Grades 5 and 8 Alternate Assessments, the items are presented online in two (2) sets. There is no formalized break between the sets. Students have two (2) trials each for the first and second set of test items. The first trial will consist of multiple-choice items with three (3) answer choices. If the student misses the answer in the first trial, the incorrect answer is removed from the choices for the second trial. The test will terminate at the end of set one for students who do not answer enough items correctly. Students who answer enough items correctly in set one will continue to set two. The assessment ends after the last item in set two.
- Tables 2 provides the item count details for Sets One and Two for the NCEXTEND1 Science assessments.

Table 2: NCEXTEND1 Science Grades 5 and 8 Operational and Field Test Items by Set

Grades	Set	Operational	Field Test	Total
5 and 8	Set 1	12	2	14
	Set 2	13	3	16
Total	–	25	5	30

Types of Items and Supplemental Materials

- The following checklists contain the required materials assessors will need for the test administration:
 - the Assessment Guide for the NCEXTEND1 Alternate Assessment
 - a device meeting all technical requirements (Use the Technical Requirements for NCTest located at <http://center.ncsu.edu/nct>.)
 - one grade-appropriate test card kit per student assessed
 - a supply of scratch paper
 - sharpened pencils with erasers or other student-specific writing utensils
 - counters/ objects (not required by the assessment, but may be used if they are included in the way in which a student is routinely taught)
- Before the test administration date, teachers must complete the online activity. The practice activity can help teachers in determining which administration option is most appropriate for their student.
- Released items for the NCEXTEND1 Science Grades 5 and 8 Alternate Assessments are available on the [NCEXTEND1 webpage](#). The released items for NCEXTEND1 may not reflect the breadth of standards assessed and/or the range of item difficulty on the NCEXTEND1 assessment.
 - Released items and forms may be used by Public School Units to help acquaint students with items.
 - These materials must not be used for personal or financial gain.

Test Cycle and Delivery Mode

- The alternate assessment must be administered during the last ten (10) days of the school year. All students in membership at grades 5, 8, and 10 (according to PowerSchool) are expected to participate with or without accommodations in the standard administration of the alternate assessments in mathematics.
- The NCEXTEND1 Science alternate assessments are teacher-facilitated online assessments that are administered individually to each student.
- The alternate assessments are only provided in English. Native language translation versions are not available. North Carolina [G.S. §115C-81.45\(a\)](#) requires all teachers and principals to conduct classes except foreign language classes in English.

Additional Resources

- Score reports will be delayed due to Standard Setting.
- Achievement Level Descriptors will be finalized during Standard Setting in July 2020 and presented to the State Board in August 2020 and will be posted to the and [NCEXTEND1 webpage](#) upon board adoption.
- A sample Individual Student Report for NCEXTEND1 Science alternate assessments will be available on the NCDPI [Individual Student Report \(ISRs\) webpage](#) after State Board approval of the Achievement Level Descriptors.