



**DC
CAPE**

DC COMPREHENSIVE
ASSESSMENTS OF
PROGRESS IN EDUCATION

DC Comprehensive Assessments of
Progress in Education (DC CAPE)

Spring 2024 Assessment Design
and Blueprint

Science Grades 5, 8, and Biology



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What is the DC Science assessment?

Beginning in the 2023-24 school year, DC has implemented a new name for its general statewide assessment system, which includes assessments in English language arts/literacy (ELA), mathematics and science. The District of Columbia Comprehensive Assessments of Progress in Education (DC CAPE) include the DC ELA assessment (DC ELA), the DC Math assessment (DC Math) and the DC Science assessment (DC Science). Together, these assessments create a comprehensive system that provides important information on students' progress and proficiency relative to DC's educational standards.

DC Science assesses the Next Generation Science Standards (NGSS). As students explore the NGSS learning standards, called Performance Expectations (PEs), they learn to make sense of scientific phenomena and solve problems using approaches that scientists use. During the test, students use scientific principles, skills, and behaviors to observe phenomena, generate questions, conduct investigations, create models, predict outcomes, analyze results, and engage in argumentation and communication. The DC Science assessment presents students with tasks built around scientific phenomena and engineering design challenges. Tasks are arranged into clusters of items designed to address NGSS's three-dimensional approach to the application of knowledge and practice—an approach that integrates Disciplinary Core Ideas (DCI), Science and Engineering Practices (SEP), and Crosscutting Concepts (CCC).

How is the DC Science assessment administered?

DC Science is a computer-based assessment that allows for the use of a variety of innovative item types where students can apply critical-thinking skills to demonstrate their understanding of the NGSS.

Who takes the DC Science assessment?

In Spring 2024, DC ELA will be administered to students in grades 5, 8, and biology.

What is the DC Science test design?

Each DC Science is completely cluster based. The following item types are used:

- Multiple choice (MC): Students select one correct answer from among four options. Items are worth one point.
- Multiple select (MS): Students select more than one correct answer from among several options. Items are worth one point.
- Technology enhanced (TE): Students taking computer-based forms respond to items using technology such as drag and drop, hot spot, and drop-down menus. TE items are worth one or two points. Partial credit may be earned on selected items.
- Constructed response (CR): Students write a response to an item with multiple components. CR items are worth three points. Partial credit may be earned on all CR items.

Table 1 summarizes the structure of the Spring 2024 DC Science assessment.

Table 1: Spring 2024 DC Science Assessment		
Grade/Course	Section*	Section Testing Time (Minutes)
5	Section 1	45
	Section 2	45
	Section 3	45
	Section 4	45
8	Section 1	45
	Section 2	45
	Section 3	45
	Section 4	45
Biology	Section 1	45
	Section 2	45
	Section 3	45
	Section 4	45

*Three of the four sections include embedded field-test items.

What factors guide item selection?

The test blueprint for each grade guides item selection. High-level blueprints for DC Science are in the Appendix.

Which accommodations are available for students taking DC Science?

OSSE is committed to providing an accessible testing experience for all students. The forms offered to students taking the DC Math assessment include:

- Braille
- Paper, including large print
- Human reader
- Text-to-speech (TTS)
- Spanish, including paper and TTS

The following tools are available in TestNav to assist any student testing online:

- Answer eliminator
- Answer masking
- Bookmark
- Calculator
- Color contrast
- Highlighter
- Line Reader
- Magnifier
- Notepad
- Pointer tool
- Pop-up glossary
- Spell check
- Writing tools

Where can I find more information?

For more information about DC CAPE, visit the OSSE website [State Assessments](#) or email the Office of Assessments at OSSE.Assessments@dc.gov.

Appendix: Science Blueprints

Grade 5

Reporting Category	Percentage of Points	Number of Points	Number of Item Sets
Physical Science	35–45%	29–37	4
Life Science	25–35%	20–29	2–3
Earth and Space Science	25–35%	20–29	2–3

Grade 8

Reporting Category	Percentage of Points	Number of Points	Number of Item Sets
Physical Science	30–40%	24–32	3
Life Science	35–45%	29–37	4
Earth and Space Science	20–30%	16–24	2

Biology

Reporting Category	Percentage of Points	Number of Points	Number of Item Sets
From Molecules to Organisms	25–35%	20–28	3
Ecosystems	30–35%	24–28	3
Heredity	10–15%	8–12	1
Biological Evolution	20–30%	16–24	2