DEPARTMENT OF EDUCATION

Assessment Details Grade 5 Science

Important Testing Dates (2020-2021)

Online testing and data ent	try:
March 8–May 21*	

* The actual dates your students take the exam varies by district. Testing calendars for each grade should be posted on your District or school's website.

Estimated Test Administration Times for Science MCA (2020-2021)

Grade and Test	Total Test Administration	
5 Science MCA	0.5-1.5 Hours**	

** The Typical Range provides the length of time approximately 70% of students finished in 2019. This MDE estimated range for scheduling should be adjusted as needed based on each district's experience.

Target Item Counts by Depth of Knowledge (DOK) Levels

The MCA-III are constructed with minimum target percentages for items at DOK levels 1, 2 and 3. The table shows the target percentages and item counts by DOK levels.

Minimum Item Count Targets by DOK Level

Grades	DOK Level 1	DOK Level 2	DOK Level 3
5,8, and High School	40-60%	35-55%	5-10%

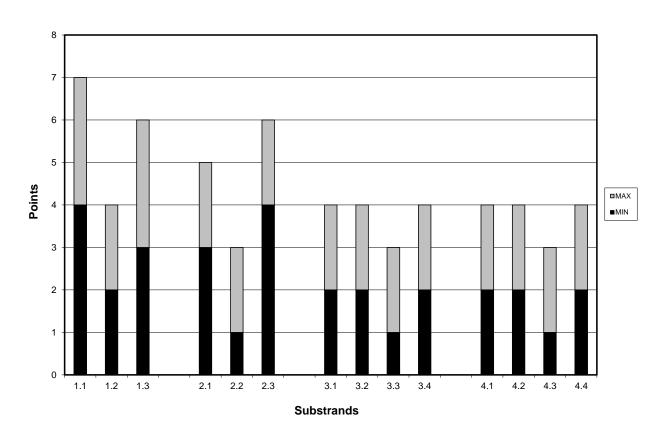
The Design by Grade Level

The following tables provide the approximate number of points by strand on the operational test for each grade. Multiple-choice (MC) items are each worth 1 point, while other item types are worth 1-3 points. Approximately 40–60 percent of the test will be comprised of multiple-choice items, and other item types will make up the remainder of the test.

Grade 5 Science MCA-III (Operational Form)

Strand	Approximate Number of Points	Approximate Percent of Points
Nature of Science and Engineering (NSE)	11-13	28
^Physical Science (PS)	9-11	24
Earth and Space Science (ESS)	9-11	24
Life Science (LS)	9-11	24
Total	41	100

Points by Substrand



Grade 3–5 Points by Substrand

Grades 3-5 Points by Substrand

1. Nature of Science and Engineering (11–13)

- 1. The Practice of Science (4-7)
- 2. The Practice of Engineering (2–4)
- 3. Interactions among Science, Technology, Engineering, Mathematics and Society (3–6)

2. Physical Science (9–11)

- 1. Matter (3–5)
- 2. Motion (1–3)
- 3. Energy (4–6)

3. Earth and Space Science (9–11)

- 1. Earth Structure and Processes (2-4)
- 2. Interdependence within the Earth System (2-4)
- 3. The Universe (1–3)
- 4. Human Interactions with Earth Systems (2-4)

4. Life Science (9–11)

- 1. Structure and Function in Living Systems (2-4)
- 2. Interdependence Among Living Systems (2-4)
- 3. Evolution in Living Systems (1-3)
- 4. Human Interactions with Living Systems (2–4)