



Assessment Details High School Science MCA

Important Testing Dates (2020-2021)

| |
|---------------------------------------|
| Online testing and data entry: |
| 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 |
|-------------------------|---------------------------|
| High School 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

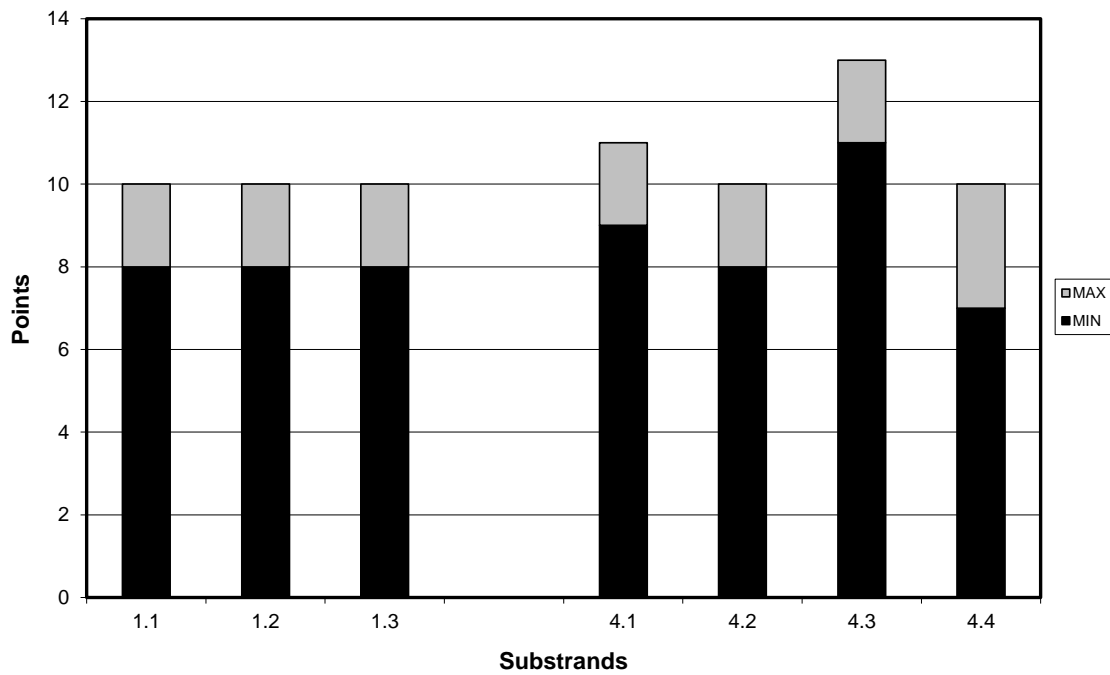
The following tables provide the approximate number of points by strand on the operational test for each grade. Multiple-choice (MC) items are each worth 1 point, while other item types are worth 1-3 points. Approximately 40–60 percent of the test will be comprised of multiple-choice items, and other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

Grade 9-12 Science MCA-III (Operational Form)

| Strand | Approximate Number of Points | Approximate Percent of Points |
|---|------------------------------|-------------------------------|
| Nature of Science and Engineering (NSE) | 24-28 | 38 |
| Life Science (LS) | 40-44 | 62 |
| Total | 68 | 100 |

Points by Substrand

Grade 9–12 Points by Substrand



Grades 9-12 Points by Substrand

1. Nature of Science and Engineering (24-28)

1. The Practice of Science (8-10)
2. The Practice of Engineering (8-10)
3. Interactions among Science, Technology, Engineering, Mathematics and Society (8-10)

2. Life Science (40-44)

1. Structure and Function in Living Systems (9-11)
2. Interdependence Among Living Systems (8-10)
3. Evolution in Living Systems (11-13)
4. Human Interactions with Living Systems (7-10)