

Assessment Details

Important Testing Dates (2018-2019)

Online testing and data entry

Science MCA: March 4 - May 10

Science MTAS: March 4 – May 3

Estimated Test Administration Times for Science MCA 2018-2019

Grade	Total Test Administration	
8	1.5-2 hours	

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%

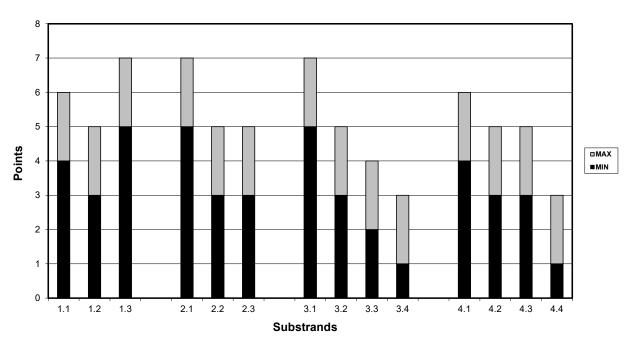
The Design by Grade Level

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 8 Science MCA-III (Operational Form)

Strand	Approximate Number of	Approximate Percent of
	Points	Points
Nature of Science and Engineering (NSE)	13-15	28
Physical Science (PS)	11-13	24
Earth and Space Science (ESS)	11-13	24
Life Science (LS)	11-13	24
Total	51	100

Points by Substrand



Grade 6-8 Points by Substrand

Grades 6-8 Points by Substrand

1. Nature of Science and Engineering (13-15)

- 1. The Practice of Science (4-6)
- 2. The Practice of Engineering (3-5)
- 3. Interactions among Science, Technology, Engineering, Mathematics and Society (5-7)

2. Physical Science (11-13)

- 1. Matter (5-7)
- 2. Motion (3-5)
- 3. Energy (3-5)

3. Earth and Space Science (11-13)

- 1. Earth Structure and Processes (5-7)
- 2. Interdependence within the Earth System (3-5)
- 3. The Universe (2-4)
- 4. Human Interactions with Earth Systems (1-3)

4. Life Science (11-13)

- 1. Structure and Function in Living Systems (4-6)
- 2. Interdependence Among Living Systems (3-5)
- 3. Evolution in Living Systems (3-5)
- 4. Human Interactions with Living Systems (1-3)