

#### **Assessment Details**

# **Important Testing Dates (2019 - 2020)**

| Online testing and data entry |  |  |
|-------------------------------|--|--|
| Science MCA: March 2 - May 8  |  |  |
| Science MTAS: March 2 – May 1 |  |  |

#### **Estimated Test Administration Times for Science MCA 2018-2019**

| Grade       | Total Test Administration |  |
|-------------|---------------------------|--|
| High School | 2-2.5 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

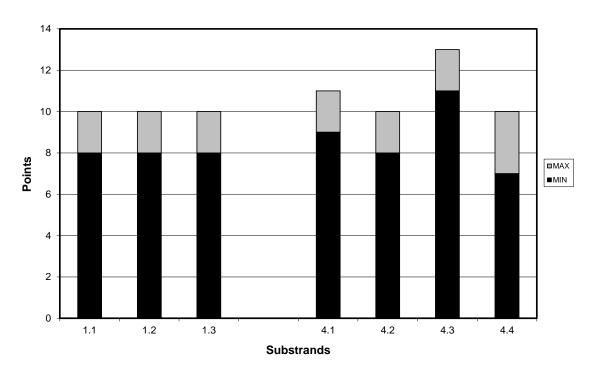
The following tables provide the approximate number of points by strand on the operational test for each grade. Multiple-choice (MC) items are each worth 1 point, while other item types are worth 1-3 points. Approximately 40–60 percent of the test will be comprised of multiple-choice items, and other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

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

| Strand                                  | Approximate Number of | Approximate Percent of |
|---|-----------------------|------------------------|
|   | Points                | 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)