

PSSA Science Test Design

The PSSA Science test plan shown in the following table is organized by grade and broken down between multiple-choice (MC) and open-ended (OE) items. Core items are also distinguished from items that serve the role of equating block (EB) and field test (FT). The following tables summarize the Science test design. Note that not all equating block items shown in the table below will be unique on all forms.

Standard Operational Science High-Level Test Plan per Form

| Grade | Multiple Choice (MC) | | | Open Ended (OE) | | | Total Core Items | Total Core Points |
|-------|--------------------------|-----------------|-------------------------|-----------------|-----------------|-------------|------------------|-------------------|
| | Core | Equating Block* | Embedded FT | Core | Equating Block* | Embedded FT | | |
| 4 | 38 | 2 | 6 | 5 | 0 | 1 | 38 MC 5 OE | 48 |
| 8 | 34 + 4 scenario-based | 2 | 4 + 4 scenario-based | 5 | 0 | 1 | 38 MC 5 OE | 48 |

*Note that not all equating block items shown in the table below will be unique on all forms.

Science PSSA Test Content Blueprints

The content blueprints for the PAS-based PSSA science assessment are shown in the following tables. The proposed blueprint is organized around four Reporting Categories based on the expressed emphasis contained within the PAS, including three under Science Content. The four corresponding Reporting Categories are:

- A = The Nature of Science
- B = Biological Sciences
- C = Physical Sciences
- D = Earth & Space Sciences

PAS-based PSSA Science Blueprint: Percent of the Core by Reporting Category by Grade

| Area | Reporting Category | Grade | |
|-----------------------|--------------------|--------|--------|
| | | 4 | 8 |
| The Nature of Science | A | 50% | 50% |
| Science Content | B | 16–17% | 16–17% |
| | C | 16–17% | 16–17% |
| | D | 16–17% | 16–17% |
| All Areas Total | | 100% | 100% |

PAS-based PSSA Science Blueprint: Points by Reporting Category by Grade

| Area | Reporting Category | Grade | |
|-----------------------|--------------------|--------|--------|
| | | 4 | 8 |
| The Nature of Science | A | 24 pts | 24 pts |
| Science Content | B | 8 pts | 8 pts |
| | C | 8 pts | 8 pts |
| | D | 8 pts | 8 pts |
| All Areas Total | | 48 pts | 48 pts |

Science Test Development Design

As shown in the operational layout tables below, the PSSA Science test will continue to be two (2) sections in 2018. Due to the use of scenarios, the design for grade 4 differs from the design of grade 8. Scenarios are used at grade 8 only. At both grade 4 and grade 8, the PSSA Science core can be described as:

| | |
|----------------------|-----------|
| 38 core MC items | 38 points |
| 5 core 2 pt OE items | 10 points |
| Total | 48 points |

Science Operational Section Layout Plan for Grade 4

| Section | Content Emphasis | Number of MC | Number of OE | Estimated Section Testing Time (in minutes) |
|---------|------------------|--------------|--------------|---|
| 1 | Science | 23 | 3 | 38 |
| 2 | Science | 23 | 3 | 38 |

Science Operational Section Layout Plan for Grade 8

| Section | Content Emphasis | Number of MC | Number of OE | Estimated Section Testing Time (in minutes) |
|---------|------------------|--------------|--------------|---|
| 1 | Science | 24 | 3 | 45 |
| 2 | Science | 24 | 3 | 45 |