

# —PCS PSSA Test Design— 2017-2018



## **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**

	Multiple Choice (MC)			Open Ended (OE)			Total Core	Total Core
Grade	Core	Equating Block*	Embedded FT	Core	Equating Block*	Embedded FT	Items	Points
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

<sup>\*</sup>Note that not all equating block items shown in the table below will be unique on all forms.



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#### Science PSSA Test Content Blueprints

The content blueprints for the PAS-based PSSA science assessment (continuing with the 2015 PSSA administration) 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	Grade		
Aled	Category	4	8	
The Nature of Science	Α	50%	50%	
	В	16–17%	16–17%	
Science Content	С	16–17%	16–17%	
	D	16–17%	16–17%	
A	ll Areas Total	100%	100%	

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

Aron	Reporting	Grade		
Area	Category	4	8	
The Nature of Science	Α	24 pts	24 pts	
	В	8 pts	8 pts	
Science Content	С	8 pts	8 pts	
	D	8 pts	8 pts	
Al	ll Areas Total	48 pts	48 pts	



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### 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