

PSSA Science Test Design

Designs for Grades 5 & 8







PSSA Science Test Design

The PSSA Science test plan shown in the following table is organized by grade and broken down between autoscored and open-ended (OE) items. Core items are also distinguished from items that serve the role of field test (FT). The following tables summarize the Science test design.

Operational Science High-Level Test Plan per Form (no. of items).

	Autoscored		Open Ended (OE)			Total Core
Grade	Core	Embedded FT	Core	Embedded FT	Total Core Items	Points
5	39	7	3	1	39 autoscored 3 open-ended	48
8	39	9	3	1	39 autoscored 3 open-ended	48

Science PSSA Test Content Blueprints

The content blueprints for the Pennsylvania STEELS-based PSSA science assessment are shown in the following tables. The blueprint includes four Reporting Categories:

- Life Sciences and Environmental Literacy & Sustainability
- Physical Sciences
- Earth & Space Sciences
- Technology and Engineering

PSSA Science Blueprint Number of Performance Expectations by Reporting Category for Each Test Administration

Reporting Category	Grade	
Reporting Category	5	8
Life Sciences and Environmental Literacy & Sustainability	19	30
Physical Sciences	18	19
Earth & Space Sciences	14	15
Technology and Engineering	34	38
Total Standards	85	102





PSSA Science Blueprint: Target Percent of the Core by Reporting Category

Paparting Catagory	Grade		
Reporting Category	5	8	
Life Sciences and Environmental Literacy & Sustainability	20%–30%	20%-30%	
Physical Sciences	20%–30%	20%–30%	
Earth & Space Sciences	20%–30%	20%–30%	
Technology and Engineering	20%–30%	20%–30%	
All Areas Total	100%	100%	

PSSA Science Blueprint: Target Core Item Counts by Reporting Category

Poparting Catagory	Grade	
Reporting Category	5	8
Life Sciences and Environmental Literacy & Sustainability	6–14	6–14
Physical Sciences	6–14	6–14
Earth & Space Sciences	6–14	6–14
Technology and Engineering	6–14	6–14
All Areas Total	42 items	42 items

PSSA Science Blueprint: Target Points by Reporting Category by Grade

Reporting Category	Grade	
Reporting Category	5	8
Life Sciences and Environmental Literacy & Sustainability	10–14	10–14
Physical Sciences	10–14	10–14
Earth & Space Sciences	10–14	10–14
Technology and Engineering	10–14	10–14
All Areas Total	48 pts	48 pts





Science Test Development Design

As shown in the operational layout tables below, the PSSA Science tests will consist of two (2) sections. Autoscored items such as Multiple-Choice (MC) and Technology-Enhanced (TE) items can be used in grades 5 and 8. Scenario sets can also be used in grades 5 and 8. At both grade 5 and grade 8, the PSSA Science core can be described as:

39 core autoscored items 39 total points 3 core 3-pt OE items 9 total points

Total 48 points

Science Operational Section Layout Plan for Grade 5

Section	Content Emphasis	Number of Autoscored 1-pt Items	Number of 3-pt Items	Estimated Section Testing Time
1	Science	23	2	41 minutes
2	Science	23	2	41 minutes

Science Operational Section Layout Plan for Grade 8

Section	Content Emphasis	Number of Autoscored 1-pt Items		Estimated Section Testing Time
1	Science	24	2	44 minutes
2	Science	24	2	44 minutes