## Shrewsbury High School Testing Report

## **2021-2022 School year**



Presented to the School Committee January 4, 2023

Todd Bazydlo, Principal Angie Flynn, Director of School Counseling

## Shrewsbury High School Testing Report Class of 2022

## **Table of Contents**

Summary Statements	3-5
Shrewsbury, State, and National SAT Scores—1600 scales	6-7
Critical Reading, Math, and Writing Scores by Gender	8
SAT Scores by Race/Ethnicity	9-11
Appropriate Grade Levels for AP Courses	12
Advanced Placement Program Participation Rates	13
Advanced Placement Average Scores by Sub Groups	14
Advanced Placement Mean Scores—SHS, Massachusetts, and Nationally	15-16
Advanced Placement Summary of All Scores	17-18
Percent of students scoring 3, 4, or 5 and AP Scholars	18-19
PSAT/National Merit Scholarship Qualifying Test	20-21

## **Summary Statements**

## **College Board Testing Administration and Score Reporting Changes**

- Beginning in 2021, the SAT no longer offered optional exams including the SAT Essay and SAT Subject tests.
- Covid-19 changed the landscape of standardized testing with two-thirds of the country's universities not requiring the SAT or ACT in the 2021-2022 application cycle.
- The 2022 SAT program results show that 1.7 million students in the high school class of 2022 took the SAT at least once, up from the 1.5 million in the class of 2021.

### **College Board SAT:**

#### Page 6 Average Scores—1600 scale (Figures 1)

- The reporting of the redesigned SAT is in its sixth year. The score is based on two section scores: Evidence Based Reading & Writing and Math with a score range from 200-800. As a result of the redesigned SAT, scores are not directly comparable to the old SAT.
- Based on the 1600 scale, Shrewsbury's SAT score of 1222 remains well above the state and national averages of 1129 and 1050, respectively.
- From 2021, the average scores in Evidence Based Reading & Writing decreased by 14 points and in Math decreased by 21 points.
- In the spring of 2020, students took the SAT online however in the fall of 2020, the SAT was offered only in person.

#### Page 6-7 SAT: Individual Critical Reading, and Math scores & Participation Rate

- On each individual section, Shrewsbury's scores are:
  - **o** Math = 619 (**Figure 2**)
  - Evidence Based Reading & Writing = 603 (Figure 3)
- The SAT participation rate for the Class of 2022 is 81%, 372 test takers. (Figure 4)
- The SAT participation rate for the Class of 2021 is 52%, 239 test takers.
- Due to the pandemic, the participation rate for the Class of 2021 was smaller both at Shrewsbury High School and in the state of Massachusetts (27,255 test takers in 2021 and 43,576 test takers in 2022) and Nationally (1.5 million in 2021 and 1.7 million in 2022).
- Prior to the pandemic, 2.1 million students participated in SAT in 2018, while 2.2 million students participated in the SAT during 2019 and 2020.

#### Page 8 SAT: Critical Reading, Math scores by Gender (Figure 5)

- In the Evidence Based Reading & Writing and Math scores, Shrewsbury females and males scored higher than the state and national trends.
- Shrewsbury females scored higher than males scored on the Evidence Based Reading & Writing section of the SAT (F/M – 607/596) similar to the state (M/F – both scored 567) and is similar with the national trend with females scoring higher (F/M - 531/526). Shrewsbury females scored lower than males (F/M – 628/611) in the Math section also similar to state (F/M – 548/576) and national (F/M – 512/530) trends.

- Evidence Based Reading & Writing (F 607; M 596)
- **o** Math (F 611; M 628)

#### Page 9-11 SAT: Critical Reading, Math scores by Race/Ethnicity (Figures 6, 7, 8)

- Students self-report race/ethnicity to the College Board. Percentages by race/ethnicity the SHS students who took the SAT are noted below with their average scores
  - Asian students' average scores (30% of SHS test takers):
    - Evidenced Based Reading & Writing: 660
    - Math: 698
  - Hispanic/Latino students' average scores (6% of SHS test takers):
    - Evidence Based Reading & Writing: 546
    - Math: 547
  - White students' average scores (56% of SHS test takers):
    - Evidence Based Reading & Writing: 580
    - Math: 586
  - Multi-race students' average scores (4% of SHS test takers):
    - Evidenced Based Reading & Writing: 634
    - Math: 636
  - Students who did not report Race/Ethnicity (3% of SHS test takers):
    - Evidenced Based Reading & Writing: 585
    - Math: 603
  - <3% of SHS test takers self-reported Black/African American; as a result of the small sample size of this group College Board did not report scores for the group to protect their anonymity

## **Advanced Placement Exams:**

### Page 12 Appropriate Grade Levels for AP Courses

- The College Board does not recommend students in the 9<sup>th</sup> grade for AP courses. Instead, students should "develop the necessary skills and conceptual understandings in foundational courses prior to enrolling in AP."
- Nationally, 97% of all AP Exams were taken by juniors and seniors.
- In the class of 2022, 23% of Shrewsbury students took three or more exams in their senior year.

#### Page 13 Participation Rates (Figure 9)

- The number of exams administered increased by 111 exams to a total of 976 exams. The number of students who took AP exams increased by forty eight students.
- The total number of students who took at least one AP exam is 448.
  - o The number of seniors that took AP exams is 243.
  - o The number of Juniors that took an AP exam is 193.
  - o The number of sophomores that took an AP exam is 10.
  - o The number of freshmen that took an AP exam is 2.
  - o Sophomores and freshmen who took exams did so through self-study, not through an SHS course
- Fifty-four percent (54%) of the students in the Class of 2022 took at least one AP exam during their high school years.

## Page 14 AP Scores by Subgroups as Self-Reported to the College Board (Figure 10)

#### Page 15-16 Average Scores—Shrewsbury High School and Nationally (Figure 11 & 12)

Scored on a scale of 1 – 5, the average AP Exam scores of Shrewsbury students are particularly impressive. All but one of the seventeen AP courses at Shrewsbury had an average score above 3.0 — and nine had an average score of 4.0 and above. All of the average AP exam scores were above the state and national averages.

#### Pages 17-18 Exam Results—Shrewsbury High School

- The percentage of students in the Class of 2022 scoring 3 or above is 91%.
- Ten out of eighteen AP courses offered at Shrewsbury had at least 90% of their students scoring at a 3 or above.
- Twenty-nine percent (29%) of the exams administered resulted in a score of 5—the highest possible score available.

#### Page 19 Scholars

- The total number of AP scholars in 2022 is 174.
- One hundred thirty of the 243 seniors (53%), who took AP exams were named AP Scholars or above.

### **PSAT/NMSQT**

#### Page 20 - 21 National Merit Scholarship Program

• Three students from the Class of 2022 were named National Merit Finalists and one student was a Scholarship Recipient.

## SAT: Evidenced Based Reading & Writing and Math Combined Score (1600 Score)

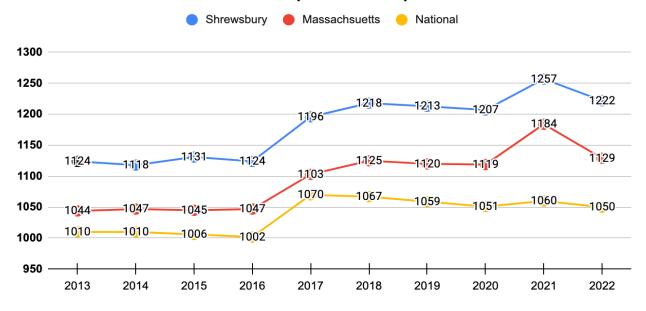


Figure 1

## SAT Math Score (800 Score)

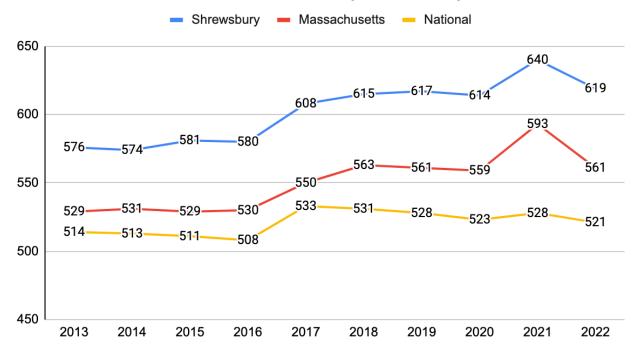


Figure 2

## SAT: Evidenced Reading & Writing (800 Score)

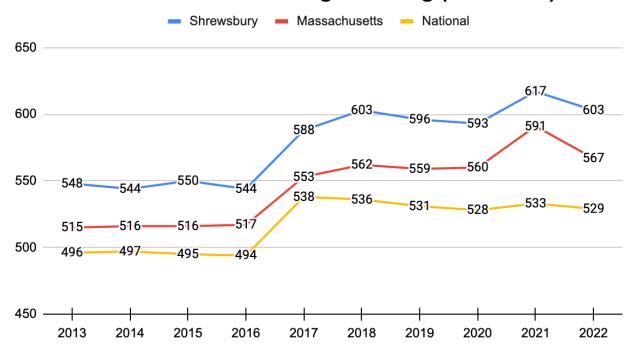
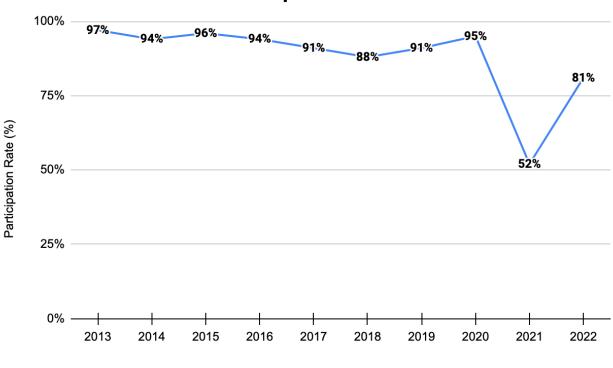


Figure 3

## **Participation Rate**



# Evidenced-Based Reading & Writing, and Math Scores by Gender Shrewsbury High School, Massachusetts, and Nationally

E-B Reading & Writing	SHS	Massachusetts	National
Males	596	567	526
Females	607	567	531
Male-to- Female Difference	-11	0	-5
Math	SHS	Massachusetts	National
Males	628	576	530
Females	611	548	512
Male-to- Female Difference	+17	+28	+18

## SAT—Scores by Gender 2022 Shrewsbury High School

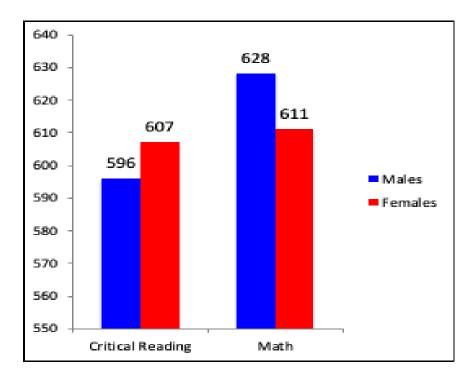
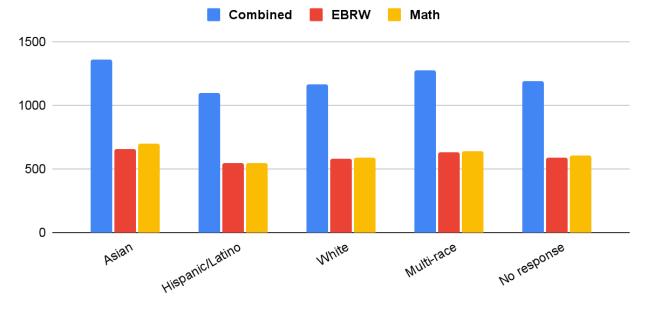


Figure 5

# Evidenced-Based Reading & Writing, and Math Scores by Race/Ethnicity Shrewsbury High School

Race/Ethnicity*	Percent	Combined	EBRW	Math
Asian	30%	1358	660	698
Black/African American	n/a	n/a	n/a	n/a
Hispanic/Latino	6%	1094	546	547
White	56%	1166	580	586
Multi-race	4%	1270	634	636
No response	3%	1188	585	603

<sup>\*</sup>Self reported by students to the College Board



Race/Ethnicity

Figure 6

# Evidenced-Based Reading & Writing, and Math Scores by Race/Ethnicity Massachusetts

Race/Ethnicity*	Percent	Combined	EBRW	Math
Asian	10%	1270	617	654
Black/African American	7%	987	498	489
Hispanic/Latino	12%	1016	512	504
White	60%	1155	583	572
Multi-race	4%	1187	600	587
No response	7%	1004	505	499

<sup>\*</sup>Self reported by students to the College Board

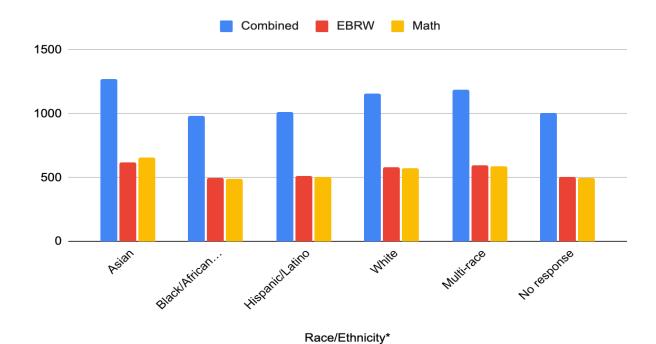
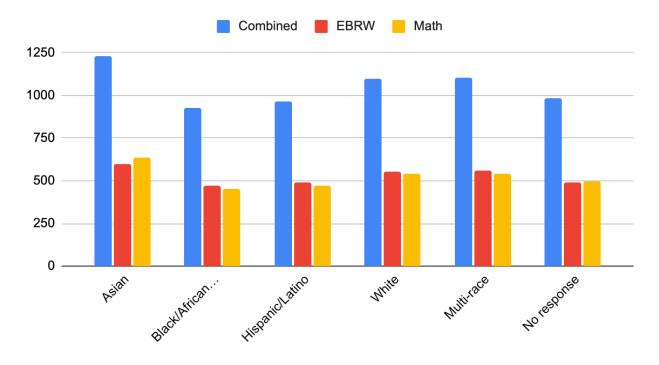


Figure 7

# Evidenced-Based Reading & Writing, and Math Scores by Race/Ethnicity National

Race/Ethnicity*	Percent	Combined	EBRW	Math
Asian	10%	1229	596	633
Black/African American	12%	926	474	452
Hispanic/Latino	23%	964	491	473
White	42%	1098	556	543
Multi-race	4%	1102	559	543
No response	8%	983	489	494

<sup>\*</sup>Self reported by students to the College Board



Race/Ethnicity\*

Figure 8

## **Advanced Placement Program**

The Advanced Placement (AP) Program consists of a series of college-level courses and exams for secondary school students. Satisfactory completion of an AP Exam makes it possible for a student to earn college credit or advanced standing in college prior to arrival on the college campus. AP Exams are rigorous, multiple-component tests that are administered each May.

Of the 458 students in the Class of 2022, 243 students (53% of the class) took at least one AP Exam, out of 448 total SHS students who took an exam. Overall, 976 exams were administered to participating SHS students in 2022.

The following AP courses were offered during the 2021 - 2022 school year:

Biology
Calculus AB
Calculus BC
Chemistry
Chinese Language
English Language
English Literature
Environmental Science
French Language

Human Geography Psychology Physics 1 Physics C: Mechanics Spanish Language Statistics Studio Art Drawing U.S. History

## **Appropriate Grade Levels for AP Courses**

The College Board's policy related to the appropriate grade levels for AP courses reads as follows:

"The AP Program recognizes the autonomy of secondary schools and districts in setting the AP course participation policies that best meet their students' unique needs and learning goals. At the same time, AP courses are specifically designed to provide challenging, college-level coursework for willing and academically prepared high school students. Student performance on AP exams illustrate that in many cases, AP courses are best positioned as part of a student's 11<sup>th</sup> and 12<sup>th</sup> grade academic experience. Some subject areas, however, such as World History and European History, can be successfully offered to academically prepared 10<sup>th</sup> grade students.

Educators should be mindful of the following when considering offering AP to younger students. AP courses are rarely offered in 9<sup>th</sup> grade, and exam results show that, for the most part, 9<sup>th</sup> grade students are not sufficiently prepared to participate in a college-level course. Therefore, the College Board believes these students would be better served by coursework focusing on the academic building blocks necessary for later, successful enrollment in college-level courses. Many college admissions officers support this position, feeling that students should not be rushed into AP coursework, but should instead develop the necessary skills and conceptual understandings in foundational courses prior to enrolling in AP."

## **Advanced Placement Participation Rates**

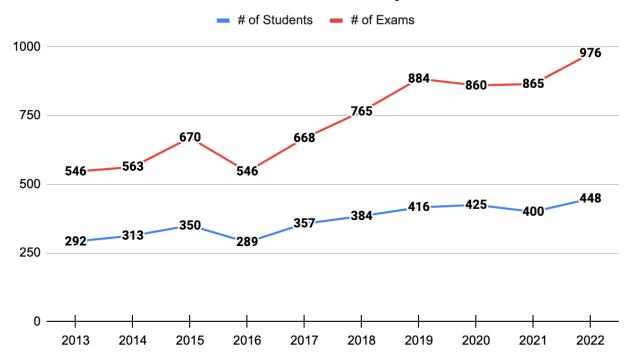


Figure 9

Of all the SHS students taking AP Exams, the percentage of students in each grade level is indicated below.					
9th grade	<1.0%				
10th grade	2.0%				
11th grade 43.0%					
12th grade	54.0%				

# of Exams Taken by Students	SHS %	SHS # of Students Taking Exams
1	35.0%	158
2	30.0%	132
3	23.0%	101
4	8.0%	37
5 or more	4.0%	20

## AP Scores by Subgroups as Self-Reported to the College Board

Category	# of Students	# of Exams	Mean Score	Total # of Juniors & Seniors	Total # of Juniors & Seniors Taking at Ieast 1 AP
Race/Ethnicity					
American Indian or Alaska Native	n/a	n/a	n/a	n/a	n/a
Asian	200	544	3.63	252	79%
Black/African American	6	9	3.78	35	17%
Hispanic or Latino	18	29	3.55	87	21%
White	196	333	3.74	641	31%
Two or more races, non-Hispanic	16	32	3.88	26	44%
No response	11	28	3.57	N/A	N/A
English Learners/Former English Learners	<5	Not reported	Not reported	Not reported	Not reported
Students with Disabilities	<5	Not reported	Not reported	Not reported	Not reported
Low Income (Fee Reduction Granted)	23	43	3.40	165	14%
Gender					
Male	176	393	3.84	454	39%
Female	268	575	3.55	522	51%
Another response	<5	Not reported	Not reported	Not reported	Not reported

Figure 10

# Advanced Placement Exams 2022 Average Scores Shrewsbury High School, Massachusetts, and Nationally

	# of Tests			
	Taken	SHS	Mass	National
Biology	84	3.95	3.33	3.10
Calculus AB	51	3.71	2.98	2.91
Calculus BC	82	4.06	3.84	3.69
Chemistry	30	4.23	3.01	2.73
Chinese Language	6	4.17	3.88	3.94
Drawing	8	4.38	3.40	3.53
English Language	121	3.74	3.04	2.83
English Literature	39	4.10	3.52	3.31
<b>Environmental Sci</b>	48	3.88	2.92	2.79
French Language	10	4.10	3.45	3.14
Human Geography	30	3.80	2.85	2.70
Music Theory	4	3.75	3.32	3.02
Physics C	27	3.70	3.60	3.42
Physics 1	61	2.66	2.54	2.47
Psychology	169	3.95	2.86	2.86
Spanish Language	11	4.00	3.60	3.51
Statistics	104	3.52	2.96	2.89
US History	53	3.00	2.88	2.57

Figure 11

## AP Average Scores: Shrewsbury, Massachusetts, & National

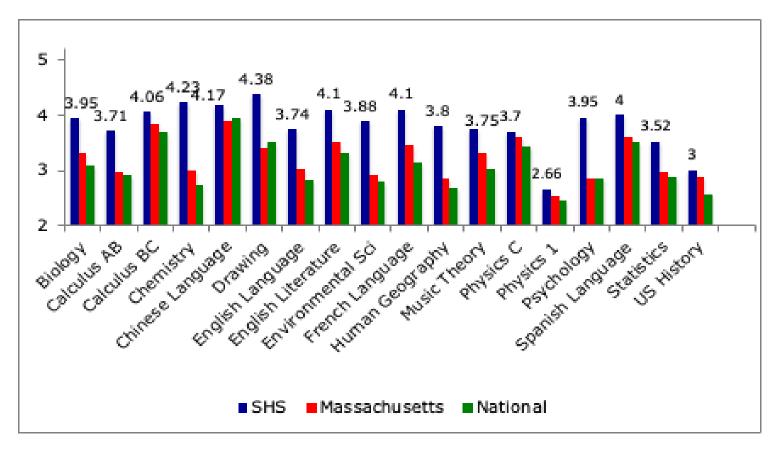


Figure 12

## **2022 Advanced Placement Exam Results**

	5	4	3	2	1	# of tests administered	2022 % scoring 5	2022 % scoring 4 or above	2022 % scoring 3 or above	2021 % scoring 3 or above
Biology	30	26	23	4	1	84	36%	67%	94%	86%
Calculus AB	19	11	9	11	1	51	37%	59%	77%	70%
Calculus BC	37	21	16	8	0	82	45%	71%	91%	86%
Chemistry	12	14	3	1	0	30	40%	87%	97%	95%
Chinese Language	2	3	1	0	0	6	33%	83%	100%	89%
Drawing	4	3	1	0	0	8	50%	88%	100%	100%
English Language	31	42	34	14	0	121	26%	61%	89%	91%
English Literature	12	20	6	1	0	39	31%	82%	97%	75%
Environmental Science	12	25	7	1	3	48	25%	77%	92%	92%
French Language	3	5	2	o	0	10	30%	80%	100%	100%
Human Geography	7	12	9	2	0	30	23%	63%	93%	90%
Music Theory	2	0	1	1	0	4	50%	50%	75%	88%
Physics C	8	9	6	2	2	27	30%	63%	85%	73%
Physics 1	3	14	17	13	14	61	5%	28%	56%	57%
Psychology	68	55	25	12	9	169	40%	73%	88%	84%
Spanish Language	2	7	2	0	0	11	24%	54%	84%	100%
Statistics	23	28	34	18	1	104	22%	49%	82%	78%
US History	6	15	14	9	9	53	11%	39%	65%	86%
Totals	281	310	210	97	40	938	30%	63%	85%	84%

Figure 13

## **Quick AP Highlights:**

- The number of students taking AP exams is 448 (48 more than last year).
- The number of AP exams administered is 976 (111 more than last year).
- 53% of seniors took at least one AP exam, a particularly high percentage compared to most high schools.
- 29% of the exams administered resulted in a score of 5—the highest possible score available.

## **Overall AP Exam Scores Shrewsbury High School**

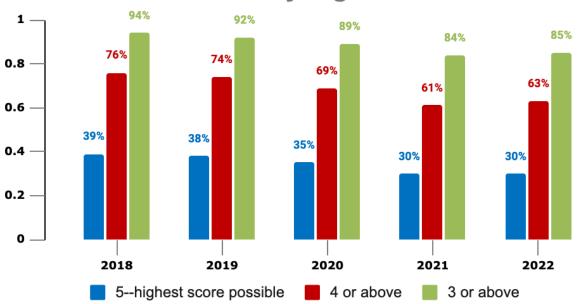


Figure 14

### **Advanced Placement Scholars**

The AP Program offers several AP Scholar Awards to recognize high school students who have demonstrated college-level achievement through AP courses and exams. Although there is no monetary award, in addition to receiving an award certificate, this achievement is acknowledged on any AP Score Report that is sent to colleges the following fall.

#### **Award Levels 2022**

<u>AP Scholar:</u> Granted to students who receive scores of 3 or higher on three or more AP Exams over the course of their time in high school.

<u>AP Scholar with Honor:</u> Granted to students who receive an average score of at least 3.25 on all AP Exams taken, **and** scores of 3 or higher on four or more of these exams.

<u>AP Scholar with Distinction:</u> Granted to students who receive an average score of at least 3.5 on all AP Exams taken, **and** scores of 3 or higher on five or more of these exams.

<u>National AP Scholar:</u> Granted to students in the United States who receive an average score of at least 4 on all AP Exams taken, **and** scores of 4 or higher on eight or more of these exams. (Students are included in the scholar category.)

Year	AP Scholar	AP Scholar w/Honors	AP Scholar w/Distinction	AP National Scholar	Total # of AP Scholars
2022	81	26	67	0	174
2021	71	45	56	0	172
2020	58	34	72	3	167
2019	69	34	64	5	172
2018	66	20	49	6	141
2017	46	18	37	4	105
2016	47	21	33	6	107
2015	48	39	37	2	124
2014	29	25	31	1	85
2013	41	26	31	1	98
2012	19	25	44	2	88

## **PSAT/NMSQT**

The Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) is a program cosponsored by the College Board and National Merit Scholarship Corporation (NMSC). It's a standardized test that provides first hand practice for the SAT. It also gives students a chance to enter the NMSC scholarship programs and gain access to college and career planning tools.

Similarly, to the SAT, the PSAT/NMSQT measures:

- Critical reading skills
- Math problem-solving skills
- Writing skills

## National Merit Scholarship Program Shrewsbury High School

Year	Commended	Finalist	Scholarship Recipient	Hispanic Recognition Program
2022	20	3	1	-
2021	27	4	1	-
2020	26	3	1	-
2019	24	4	1	-
2018	18	5	1	-
2017	15	1	1	-
2016	19	2	2	-
2016	19	2	2	-
2015	19	1	1	-
2014	14	1	1	-
2013	17	4	1	1
2012	19	4	1	-
2011	12	1	1	-
2010	16	4	1	-
2009	17	3	1	-
2008	18	2	1	-
2007	14	3	1	-
2006	10	3	-	1
2005	15	2	-	-
2004	8	2	1	-
2003	8	2	1	2
2002	5	3	-	-
2001	4	1	-	-

### **National Merit Scholarship Program**

**Program Recognition:** Of the 1.5 million juniors who take the PSAT, the top 2%-3% with the highest combined scores (Reading + Mathematics + Language and Writing Skills) qualify for recognition in the National Merit Scholarship Program.

**Commended Students:** students who score in the top 2% - 3% of all test takers.

<u>Semifinalists:</u> students who score in the top 1% - 1.5% of all test takers. To ensure that academically able young people from all parts of the United States are included in this talent pool, Semifinalists are designated on a state-by-state basis. That is, semifinalists are the highest scoring entrants in each state. To be considered for a National Merit Scholarship, Semifinalists must advance to Finalist standing in the competition by meeting high academic standards.

**<u>Finalists:</u>** Most students (approximately 90%) who complete the Semifinalist application process will be named National Merit Finalists.

**Scholarship Recipients:** All winners of Merit Scholarship awards (Merit Scholar® designees) are chosen from the Finalist group, based on their abilities, skills, and accomplishments-without regard to gender, race, ethnic origin, or religious preference. A variety of information is available for NMSC selectors to evaluate-the Finalist's academic record, information about the school's curricula and grading system, two sets of test scores, school official's written recommendation, information about the student's activities and leadership, and the Finalist's own essay.