

INTRODUCTION

What is the SSAT?

The Secondary School Admission Test (SSAT) is a standardized test for students applying for private secondary schools in the United States of America. Many U.S. boarding schools' admission offices use prospective students' SSAT scores, on top of students' school grades, extra-curricular activities, and other accomplishments, to aid them in admission decisions. Scoring high in the SSAT, therefore, will definitely help you in the boarding school application process!

You can always find more information from the test maker's website:
<http://www.ssat.org/ssat>

For information about schools that accept SSAT scores, visit:
<http://www.ssatmembers.org/>

What is in the test?

First of all, there are two versions of the test: the Lower Level test is for students currently in grades 5-7 (Primary 5-Form 1 or Year 6-8), and the Upper Level test is for students currently in grades 8-11 (Form 2-Form 5 or Year 9-12). All questions in the SSAT are in English, and there are enough editions of the tests to ensure that students will not encounter the same test more than once. You only need to take one of the two.

There are five sections in the SSAT. There are a *Writing Sample* Section that lasts 25 minutes, a *Reading Comprehension* Section that lasts 40 minutes, and three multiple-choice sections (one *Verbal* and two *Quantitative (Math)*), each of which is 30 minutes long. Each multiple-choice question has 5 choices. You cannot move on to the next section even if you finish another section early!

This book we will focus on the two *Math* sections of the SSAT, each of which contains 25 questions. Every time you take the SSAT test, the five sections may appear in a different order, but most likely you will not take the two *Math* sections consecutively. Also, a calculator is **not** allowed!



How do they score the test?

Every multiple-choice question is worth the same amount. Your final score for the test is calculated by using this formula:

$$\# \text{ of questions answered correctly} - \# \text{ of questions answered incorrectly} \times \frac{1}{4}$$

For any unanswered questions, no points are awarded nor deducted; however, if you pick more than one answer for a question or answer incorrectly you will be penalized!

Because there are only two versions (one for 5th to 7th graders and another for 8th to 11th graders) of the test, it is obvious that, say, most 11th graders will get better scores than most 8th graders. Schools will take that into account and will compare your score with the scores of other students of your grade. As a test-taker (especially for students not in the 7th or 11th grade), you will probably see some questions that are too difficult for your level in the SSAT. This is normal because the test maker has to use the same test to test students of various grade levels. Do not feel dejected! As an applicant, you should find out what kind of score your prospective schools accept and aim to score in that range.

TEST-TAKING STRATEGIES

Pacing

There are 30 minutes for you to tackle 25 problems—that gives you an average of 1 minute and 12 seconds to solve each problem. Questions, in terms of difficulty, are normally ordered from easy to hard, so you should try to complete the first 10 or so problems as quickly as possible to leave enough time to tackle the more difficult problems towards the end. This is not to say you should speed through the beginning by sacrificing accuracy! Remember that all questions are worth the same amount of points, so getting the correct answers in the beginning is as important as getting the correct answers at the end.

Reading the questions and choices (Correctly!)

A common pitfall among students is misreading the question and/or answer choices. I will illustrate this with an example:

A square has a perimeter of 64 cm. What is the length of its side in meters?

- A. 8 cm
- B. 16 cm
- C. 5 cm
- D. 0.16 m
- E. 10 cm

Careless students may pick choice A if they misread 64 as the square's area (it happens!). Others may pick choice B, only to be ultimately disappointed because they did not notice the question asked about the answer in METERS. The correct choice is D.

To avoid such a misfortune, you can circle/underline/highlight keywords of the question so that you can remind yourself what the question is asking. Make sure you read through all the answer choices too!

Using the empty space wisely

Since you are not allowed to use a calculator, you probably will use the space provided in the test to perform a lot of written calculations. You should always write as legibly as possible in your calculations. When you finish the test early and have extra time, go back and check your calculations and answers. You do not need to re-calculate—all you need to do is to check your written calculations and look for any errors. This will let you recheck more answers in the limited time.

Eliminating choices/Educated guess

Because there is a penalty for answering a question incorrectly, you should never make blind guesses for any questions. It is better to leave it blank if you have no idea about a question!

Nonetheless, if you use **educated guessing** that can help you achieve a better score even if you cannot solve a question. The key to the technique is to try to eliminate answer choices: after you have read the question, try to eliminate any answer choices that are **surely incorrect**; then, even if you cannot figure out the correct answer, you can guess from the remaining choices. Let me illustrate:

X is a positive integer. What is X if $X^2 + \frac{15}{X} + 3X^3 = 95$?

- A. -5
- B. 3
- C. 8
- D. 5.4
- E. 6

Let's say you do not know how to solve this outright. If you read the question carefully, you notice X has to be both positive and an integer. Thus choice A and choice D can be eliminated. Now you are down to 3 choices, and odds are in your favor: you should now guess out of the 3 choices because you are now using an educated guess, which in the long run is more likely than not to add points to your total score even though you are guessing on some questions.

“How is that possible?” you might ask. Let's try to explain this mathematically. When you are randomly guessing among 5 choices, you have a one-out-of-five chance of

getting a question correct. Let's say you guess on every question in a 20-question test; you will get roughly 4 questions correct, because it should take you 5 questions to get 1 correct according to probability theory. Because of the way SSAT is scored, you will get

$$4 \text{ points } (1 \text{ point} \times 4 \text{ questions}) - 4 \text{ points } \left(\frac{1}{4} \text{ point} \times 16 \text{ questions}\right)$$

which equals 0 points! What if you use educated guessing? If you can eliminate one choice per question in the same test, under the same concept you should get

$$5 \text{ points } (1 \text{ point} \times 5 \text{ questions}) - 3.75 \text{ points } \left(\frac{1}{4} \text{ point} \times 15 \text{ questions}\right)$$

which equals 1.25 points! In the long run, using educated guessing will increase your score, while random guessing may hurt your score in a test!

While using the educated guess technique, you have to be careful: eliminate choices only if you can provide a logical reason. Some students may try to eliminate choices based on their feeling. "This choice does not seem right, but I cannot explain why." They might think. This is NOT educated guess! You have to provide a legitimate basis before you eliminate a choice; or else you are just randomly guessing!

POPULAR BOARDING SCHOOL INFORMATION

Listed below are some of the top boarding schools in the United States. They are all very selective in accepting applicants, and they offer Advanced Placement courses in abundance. The average SAT scores of students from these schools are in the 2000s range, which show that these schools are providing quality education. Besides academics, these schools also provide ample extracurricular activities, be it in sports or interests clubs and organizations.

These schools are listed in alphabetical order; all information was collected in 2008. Sources include Petersons.com and boardingschoolreview.com.

Phillips Academy Andover

Mrs. Jane F. Fried, Dean of Admission

180 Main Street

Andover, Massachusetts 01810

Phone: 978-749-4050

Fax: 978-749-4068

E-mail: admissions@andover.edu

URL: <http://www.andover.edu>

Founded in 1778, Andover is one of the most historic boarding schools in the U.S. In 2008, it had an enrollment of 1109 students, of which 7% were international students. The average SAT score of students is 2008 and the average ACT score is 29.3. Andover offers 30 AP/Advanced courses, and has an average class size of 13 students. It offers a large selection of interscholastic sports; besides the usual like basketball, volleyball and track and field, it also has an ultimate Frisbee team, a diving team, and a Nordic skiing team!

Andover is very selective: its acceptance rate is 20% out of the pool of day and boarding applicants. It requires SSAT score in admission and the average SSAT percentile for acceptance is 93%. Popular choices of university for Andover graduates include Harvard, University of Pennsylvania, Yale, Georgetown, and Columbia.



The Athenian School

Christopher Beeson, Director of Admission
2100 Mt. Diablo Scenic Boulevard
Danville, California 94526
Phone: 925-362-7223
Fax: 925-855-9342
E-mail: admission@athenian.org
URL: <http://www.athenian.org>

Located in sunny California near San Francisco, Athenian had an enrollment of 300 students in 2008, of which 10% were international students. The average SAT score of students is 1900. Athenian offers 12 AP/Advanced courses, and has an average class size of 15 students. It requires its students to participate in a wilderness course and it offers an airplane construction project as one of its extracurricular activities.

Athenian's acceptance rate is 43%. Popular choices of university for Athenian graduates include Brown, University of Pennsylvania, University of Southern California, UC Berkeley and UCLA.

Cate School

Charlotte Brownlee, Director of Admission
1960 Cate Mesa Road
Post Office Box 5005
Carpinteria, California 93014-5005
Phone: 805-684-4127 ext 217
Fax: 805-684-2279
E-mail: admission@cate.org
URL: <http://www.cate.org>

Located in California, Cate had an enrollment of 265 students in 2008, of which 6% were international students. The average SAT score of students is 1970. Cate offers 19 AP/Advanced courses, and has an average class size of 10 students. In fact, it boasts one of the lowest teacher-student ratios at 1-to-5. It has a ballet team and features a recycling club among others.

Cate is very selective and has an acceptance rate of 30%. It requires SSAT score in admission and the average SSAT percentile for acceptance is 80%. Popular choices of university for Cate graduates include University of Pennsylvania, University of Southern California, UC Berkeley, UCLA, Stanford, New York University and Columbia.

Choate Rosemary Hall

Raymond M. Diffley III, Director of Admission

Choate Rosemary Hall

333 Christian Street

Wallingford, Connecticut 06492-3800

Phone: 203-697-2239

Fax: 203-697-2629

E-mail: admission@choate.edu

URL: <http://www.choate.edu>

Founded in 1890, Choate is a historic boarding and day school in the U.S. In 2008, it had an enrollment of 840 students, of which 12% were international students. The average SAT score of students is 1981. Choate offers 25 AP/Advanced courses, and has an average class size of 12 students. It offers a large selection of extracurricular organizations such as Habitat for Humanity, Environmental Action Coalition, and Association for Appreciation of the Arts and interscholastic sports that include diving, ice hockey and field hockey.

Choate is very selective: its acceptance rate is 24% out of the pool of day and boarding applicants. It requires SSAT in admission, but information about the average percentile is not disclosed. Popular choices of university for Choate graduates include Yale, Boston University, Cornell, Harvard, Georgetown and Brown.

Concord Academy

Pamela J. Safford, Associate Head for Enrollment and Planning

166 Main Street

Concord, Massachusetts 01742

Phone: 978-402-2250

Fax: 978-402-2345

E-mail: admissions@concordacademy.org

URL: <http://www.concordacademy.org>



SSAT Math

In 2008, Concord had an enrollment of 367 students, of which 8% were international students. The average SAT score of students is 2040. Concord offers 26 AP/Advanced courses, and has an average class size of 12 students. 83% of Concord's faculty have advanced degrees. For sports and extracurricular activities, Concord offers alpine skiing and sailing for its students.

Concord requires SSAT in admission and the average SSAT percentile for acceptance is 80%. Popular choices of university for Concord graduates include Brown, New York University, Connecticut and Wellesley College.

Dana Hall School

Wendy Sibert Secor, P13, P15, Director of Admission and Financial Aid
45 Dana Road
Wellesley, Massachusetts 02482
Phone: 781-235-3010
Fax: 781-239-1383
URL: <http://www.danahall.org>

Founded in 1881, Dana Hall is a female boarding school near Boston. In 2008, Dana Hall had an enrollment of 500 students, of which 12% were international students. The average SAT score of students is 1854. Dana Hall offers 14 AP courses and has an average class size of 12 students. It offers a large selection of interscholastic sports and extracurricular activities that includes fencing, squash, and aqua aerobics.

Dana Hall requires SSAT in admission and the average SSAT percentile for acceptance is 62%. Its acceptance rate is 38%. Popular choices of university for Dana Hall graduates include Boston University, Trinity College, Brandeis University and Wellesley College.

Deerfield Academy

Patricia L. Gimbel, Dean of Admission and Financial Aid
7 Boyden Lane
PO Box 87
Deerfield, Massachusetts 01342
Phone: 413-774-1400
Fax: 413-772-1100
E-mail: admission@deerfield.edu
URL: <http://www.deerfield.edu>



Founded in 1797, Deerfield is another historic boarding school in the U.S. In 2008, Deerfield had an enrollment of 605 students, of which 10% were international students. The average SAT score of students is 2020. Deerfield offers 19 AP courses and has an average class size of 12 students. It offers a large selection of interscholastic sports and extracurricular activities that includes aerobics, ballroom dancing, ballet, alpine skiing and cheerleading.

Deerfield requires SSAT in admission and the average SSAT percentile for acceptance is 88%. Popular choices of university for Deerfield graduates include Harvard, Yale, Princeton, Columbia and Georgetown.

Emma Willard School

Christine Hoek, Director of Strategic Initiatives

285 Pawling Avenue

Troy, New York 12180

Phone: 518-833-1320

Fax: 518-833-1815

E-mail: admissions@emmawillard.org

URL: <http://www.emmawillard.org>

Emma Willard is one of the most historic all-girls boarding schools. It was founded in 1814 by Madame Willard and ever since its establishment has educated young women from all over the world. In 2008 it had an enrollment of 314 students and 17% of them were from outside of the United States. Emma Willard's students average an SAT score of 1892 and enjoy an average class size of 11 students. 15 Advanced Placement courses are offered in Emma Willard, and a summer program is available. For admissions, its acceptance rate is 50% and the average SSAT percentile scored by accepted students is 65%.

Phillips Exeter Academy

Michael Gary, Director of Admissions

20 Main Street

Exeter, New Hampshire 03833-2460

Phone: 603-777-3437

Fax: 603-777-4399

E-mail: admit@exeter.edu

URL: <http://www.exeter.edu>



Exeter, which was founded in 1781, is considered by many an excellent boarding school with a long and rich history. In 2008, Exeter had a student body of 1045, and 12% of it had an international background. 83% of the faculty hold advanced degrees and students average 2085 in the SAT. Exeter offers Saturday classes and a summer program, and has a myriad of sports and extracurricular activities for students to participate in for a well-rounded education.

Exeter requires applicants to take the SSAT. It is highly selective—it only accepts 21% of applicants. University of Pennsylvania, Harvard, Princeton, Columbia, John Hopkins and Dartmouth are some common choices of universities for Exeter graduates.

Groton School

Mr. Ian Gracey, Director of Admission

P.O. Box 991

Groton, Massachusetts 01450

Phone: 978-448-7510

Fax: 978-448-9623

E-mail: admission_office@groton.org

URL: <http://www.groton.org>

Groton is an Episcopal boarding school that had 356 students in 2008; despite its relatively small size, it provides resources that are comparable to much larger schools. In 2008, 10% of the student body were international students. The average SAT score is 2080 and the average SSAT percentile for admission is 90%. A school that has an average class size of 13 students and offers 30 AP courses, Groton only accepts 19% of its applicants. Popular university choices include Harvard, Princeton, Yale, Vanderbilt and Brown.

The Hill School

Thomas Eccleston IV, Director of Admission and Enrollment Management

717 East High Street

Pottstown, Pennsylvania 19464

Phone: 610-326-1000

Fax: 610-705-1753

E-mail: admission@thehill.org

URL: <http://www.thehill.org>

Founded in 1851, the Hill School is a day and boarding school in Pennsylvania. In 2008, it had a student body of 494 students and the gender breakdown was 56% boys and 44% girls. 9% of its students were international, and 24% of the student body were boarding students. The Hill School requires its students to board for 1 year, and is known for its breadth of extracurricular activities offered. Students averaged 1841 in the SAT in 2008, and they enjoy a class size of 12 students on average with a student-teacher ratio of 7 to 1. 20 Advanced Placement courses are offered, and Saturday classes are available. The school has an acceptance rate of 38%, and the average SSAT percentile for acceptance is 74%. Bucknell, University of Pittsburgh, Boston University and Colgate University are some of the popular destinations of Hill's graduates.

The Hotchkiss School

Rachael N. Bearem, Dean of Admission and Financial Aid

P.O. Box 800

Lakeville, Connecticut 06039

Phone: 860-435-3102

Fax: 860-435-0042

E-mail: admission@hotchkiss.org

URL: <https://www.hotchkiss.org>

Founded in 1891, Hotchkiss is a historic boarding and day school in the U.S. In 2008, it had an enrollment of 574 students, of which 28% were international students. The average SAT score of students is 2013. Hotchkiss offers 21 AP/Advanced courses, and has an average class size of 12 students. It offers a large selection of extracurricular organizations such as knitting club, aviation club, and a capella groups and interscholastic sports that include diving, ultimate Frisbee and drill team.

Hotchkiss is very selective: its acceptance rate is 20% out of the pool of day and boarding applicants. It requires SSAT in admission, and the average SSAT percentile for acceptance is 92%. Popular choices of university for Hotchkiss graduates include Georgetown, Middlebury, Cornell, and University of Pennsylvania.

