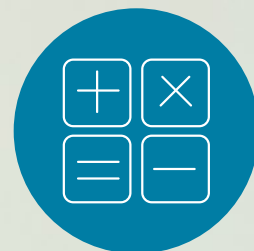


The **SSAT**
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2021-2022

Interpretive Guide
for the Elementary Level SSAT

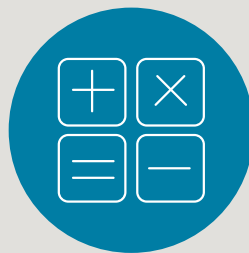


The Enrollment Management Association is pleased to provide this guide in order to acquaint member schools and organizations with various aspects of the Secondary School Admission Test (SSAT) and to provide guidelines for the interpretation and use of test scores.

For more than 50 years, the SSAT has been used to help students and schools make critical decisions about applying and admission. Sections of the SSAT measure verbal and mathematical ability and reading comprehension. The test also includes an unscored, timed writing sample, which is sent to schools with the student's score report to supplement the student's application for admission.



Each student takes the SSAT under standardized testing conditions and is given the same amount of time and instruction (exceptions are made for those who qualify for testing accommodations). This guide contains information for the Elementary Level exam for students in grades 3 and 4.



The **Enrollment Management** Association
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Introduction

The *Interpretive Guide for the Elementary Level SSAT* has been prepared to assist with the interpretation of SSAT results. Although this guide does not cover all aspects of the psychometric data that is available about the SSAT, it does provide information that can help admission officers and educators with those aspects of the test that are most useful to them. In addition, this guide contains general information about the SSAT.

Purpose of the SSAT

The SSAT is designed for students who are seeking entrance to independent schools in grades 4 to PG in the U.S., in Canada, and worldwide. The purpose of the SSAT is to measure the basic verbal, quantitative, and reading skills students develop over time that are needed for successful performance in independent schools. The SSAT provides independent school admission professionals with meaningful information about the possible academic success of potential students at their institutions, regardless of students' background or experience.

The SSAT is not an achievement test. It is not designed to measure the extent of knowledge about a specific curriculum that has been covered in class. Further, SSAT tests are not designed to measure other characteristics, such as motivation, persistence, or creativity, that may contribute to a student's success in school.

Test Development Process

SSAT test items are written by test development specialists and subject matter experts. Our test editors review all test material for any questions that may be inappropriate for various subgroups of the population. In addition, questions are reviewed for ambiguities to ensure that there is only one "best" response for each item.

In order to develop a pool of items for future tests, the Elementary Level test contains a brief experimental section. These questions have been developed, scrutinized, and determined to meet SSAT standards. Each test question is then analyzed statistically to determine usefulness. Satisfactory items become part of the item pool from which new editions of the test are assembled. Unsatisfactory items are discarded or rewritten. Rewritten items are subject to the review and pretesting process again. These experimental questions are not part of a student's score.

Test Specifications

This guide contains information on the Elementary Level SSAT. The Elementary Level test is administered to students in grades 3 and 4.

The Elementary SSAT consists of three multiple-choice sections with a testing time of 20 minutes for the verbal section, 30 minutes for the quantitative section, and 30 minutes for the reading section. These sections yield four scores:

- + Verbal
- + Quantitative (Math)
- + Reading Comprehension
- + Total (Verbal + Quantitative + Reading)

In addition, each administration of the Elementary SSAT includes a 15-minute writing sample. Writing samples are not scored but are submitted to score recipients to supplement a student's application. The total testing time for a standard Elementary SSAT administration is 125 minutes, which includes the experimental section and a 15-minute break.

Samples of SSAT question types are provided on the SSAT website and in *The Official Guide to the Elementary Level SSAT*. This publication is available as a free download from the SSAT website, www.ssat.org.





Content and statistical specifications can help ensure that the test indeed measures the intended construct for the target population, that multiple forms are built to the same blueprint, and that scores earned on different forms are comparable after score equating. Items are scrutinized according to a number of factors so that content, skills measured, and overall difficulty of items are consistent in all test editions. A brief description of content specifications for each section of the Elementary SSAT follows.

Verbal Section

The verbal section of the test consists of 15 synonym questions and 15 analogy questions. The synonym portion measures verbal ability. The analogy portion measures a student's proficiency in identifying logical relationships between words and concepts.

The verbal section is not intended to be a test of vocabulary only and therefore includes common words that are expected to be familiar to the average SSAT test taker.

Both types of verbal items—synonyms and analogies—are carefully balanced to avoid advantage or disadvantage to students whose interests and backgrounds may have led them to read more or acquire a large vocabulary in specific areas.

Quantitative Section

The Elementary SSAT includes a quantitative section containing 30 questions. The questions are designed to measure understanding of mathematical concepts, computation, routine mathematical manipulations, and problem solving, as well as some recall of basic nomenclature and rules. The test items vary in difficulty and measure different levels of understanding. Depending upon the student's experiences in school, some concepts may be unfamiliar.

The questions in this section are drawn from the following areas:

- + Basic addition, subtraction, multiplication, and division
- + Factors and multiples (4th grade only)
- + Place value
- + Ordering of numbers (greater than, less than)
- + Fractions
- + Patterns (4th grade only)
- + Basic concepts of geometry (shapes and their attributes)
- + Basic concepts of measurement
- + Interpretation of graphs
- + Basic concepts of angle measurements (4th grade only)





Reading Comprehension Section

The reading comprehension section consists of 28 questions based on seven reading passages that include prose and poetry, fiction, and nonfiction. The passages cover a variety of subject areas so that examinees will not be at an advantage or disadvantage as a result of encountering material related to an area with which they may or may not be familiar. The passages vary in length but are typically 100 to 300 words.

The reading comprehension questions, designed to measure a student's ability to understand and assimilate what has been read, ask the test taker to:

- + Locate information and find meaning by skimming and close reading
- + Demonstrate literal, inferential, and evaluative comprehension
- + Show understanding of key ideas and details, as well as the meaning of words and phrases as they are used in the text
- + Determine the theme of a story, drama, or poem from details of the text

Writing Section

The Elementary SSAT includes an unscored writing sample that is sent to schools with the student's score report. The student is asked to look at a picture and write a story about what happened. The student has 15 minutes to complete the writing portion of the exam.





Administration of the SSAT

Test Security

The SSAT is a secure test. The integrity of the test prior to and following a test administration is strictly maintained. Testing centers must meet rigid standards and comply with established rules for the receipt, storage, administration, and return shipment of test materials.

Uniform Conditions

The SSAT is a standardized test. Test development, interpretation of scores, and test administration are managed in a prescribed way. To ensure that scores earned by examinees at different administrations are strictly comparable, the *Test Administrator's Guide to the SSAT* provides precise instructions, to be followed by qualified and experienced test administrators, from the moment the student is admitted to the test center until the time of dismissal. Any deviations from the uniform testing conditions are reported in writing to The Enrollment Management Association. Each report is reviewed by The Enrollment Management Association and issues and/or problems are resolved.

Testing Accommodations

A student with a disability may apply for testing accommodations for administrations of the SSAT. Students requiring testing accommodations such as extra time, large print, or Braille editions of the test, for example, may be accommodated, pending application and submission of documentation (if applicable).

Additional information regarding application for testing accommodations is available on the SSAT website: www.ssat.org/TA.

Reporting SSAT Scores

There are two types of test administrations for which scores are reported—Standard test administrations (six per the 2021-2022 admission year) and Flex test administrations—available on an as-needed basis at member sites.

For Standard administrations, school scores are routinely reported online on the second Tuesday following the test administration for score recipients selected prior to score release. Student score reports are routinely reported on the Wednesday following the Tuesday that scores are available to schools. For Flex administrations, scores are reported online via roster within 10 business days from receipt of test materials.

Score Reports

The SSAT score report is available to schools, educational consultants, and educational organizations. Parents, guardians, students, or advisers designate school score report recipients. A separate score report is provided to the test taker. Score reports to test takers do not contain any school-specific information.

SSAT scores are reported to schools online in exportable rosters and as individual report PDFs.

Context is a key component to effective interpretation of test scores. To increase support for SSAT score interpretation, school applicant comparison context data is added to the school score reports following the school's submission of data on accepted and enrolled students. For the 2021-2022 year, the scores of a test taker are placed in many different contexts on the school score report.



School Score Report Sample

The SSAT

Third Elementary
862 Route 518
Skillman, NJ 08558
United States

ddavidian@ssat.org
6094366135
Gender: Male
DOB: May 03, 2012

Grade: 3
Level: Elementary Grades 3-4
Test Date: Aug 01, 2020
Registration ID: 212170117

Third's Total SSAT Score Summary

Your Score
1500

Average 3rd Grade Score: 1433

* All scores fall between 900 and 1800 (with 1800 being a perfect score)

60th Percentile

Third scored equal to or higher than 60% of students in grade 3

Verbal 57th Percentile

Your Score
500

Average 3rd Grade Score 483

If taken multiple times, your score would fall between: 480 - 520

Total Items: 30

| | | |
|---------|-----------|--------------|
| 21 | 9 | 0 |
| Correct | Incorrect | Not Answered |

Synonyms Total: 15

| | | |
|---------|-----------|--------------|
| 10 | 5 | 0 |
| Correct | Incorrect | Not Answered |

Analogies Total: 15

| | | |
|---------|-----------|--------------|
| 11 | 4 | 0 |
| Correct | Incorrect | Not Answered |

Questions testing your knowledge of words (synonyms) and your ability to relate ideas (analogies)

Quantitative 58th Percentile

Your Score
490

Average 3rd Grade Score 475

If taken multiple times, your score would fall between: 470 - 510

Total Items: 30

| | | |
|---------|-----------|--------------|
| 21 | 9 | 0 |
| Correct | Incorrect | Not Answered |

Number Concepts & Operations Total: 14

| | | |
|---------|-----------|--------------|
| 8 | 6 | 0 |
| Correct | Incorrect | Not Answered |

Algebra, Geometry & Other Total: 16

| | | |
|---------|-----------|--------------|
| 13 | 3 | 0 |
| Correct | Incorrect | Not Answered |

Questions testing your knowledge of number properties and relationships, basic computation, concepts of equivalencies, geometry, measurement, and interpretation of charts/graphs

Reading 70th Percentile

Your Score
510

Average 3rd Grade Score 475

If taken multiple times, your score would fall between: 490 - 530

Total Items: 28

| | | |
|---------|-----------|--------------|
| 19 | 9 | 0 |
| Correct | Incorrect | Not Answered |

Reading Main Idea & Content Total: 19

| | | |
|---------|-----------|--------------|
| 12 | 7 | 0 |
| Correct | Incorrect | Not Answered |

Reading Higher Order & Interpretation Total: 9

| | | |
|---------|-----------|--------------|
| 7 | 2 | 0 |
| Correct | Incorrect | Not Answered |

Questions regarding the main idea and supporting details of a passage or requiring higher order skills, such as deriving the meaning of words from context, extracting the meaning of a passage, or interpreting an author's logic, attitude and tone

Only scaled scores should be used to compare between individuals.

Applicant Comparison Data for (Grade 3)

Your school's applicant comparison data must be provided in order to complete this chart.

| | All 2020-2021 Reports | | |
|---------------------|-----------------------|----------------------------------|----------------------------------|
| | Rank Order | All Accepted Students Rank Order | All Enrolled Students Rank Order |
| Verbal | | | |
| Quantitative (Math) | | | |
| Reading | | | |
| TOTAL | | | |
| Average Score | | | |
| Verbal | | | |
| Quantitative (Math) | | | |
| Reading | | | |
| TOTAL | | | |

SSAT Writing Sample

Look at the picture and tell a story about what happened. Make sure your story includes a beginning, a middle, and an end.

The children were playing in the park when the bubble man came for the show.

Everybody came running over to see the show. There were lots of big bubbles.

A boy tried to pop them. He missed and fell down.

He started to cry.

His other friends came over to take him to



his mom.

He went home. And
didn't come to the
park again for a
long time.



Family Score Report

The family score report is available to families online for free. A hard copy of the score report can be mailed to a family for an additional fee.

Third Elementary
862 Route 518
Skillman, NJ 08558
United States

ddavidian@ssat.org
6094366135
Gender: Male
DOB: May 03, 2012

Grade: 3
Level: Elementary Grades 3-4
Test Date: Aug 01, 2020
Registration ID: 212170117

Third's Total SSAT Score Summary

Your Score
1500

Average 3rd Grade Score: 1433

* All scores fall between 900 and 1800 (with 1800 being a perfect score)

60th Percentile

Third scored equal to or higher than 60% of students in grade 3

Verbal 57th Percentile

Your Score
500

Average 3rd Grade Score 483

If taken multiple times, your score would fall between: 480 - 520

| | | | | | |
|-----------------|-----------|--------------|----------------|--|--|
| Total Items: 30 | | | Not Reached: 0 | | |
| 21 | 9 | 0 | | | |
| Correct | Incorrect | Not Answered | | | |

Synonyms Total: 15

| | | |
|---------|-----------|--------------|
| 10 | 5 | 0 |
| Correct | Incorrect | Not Answered |

Analogies Total: 15

| | | |
|---------|-----------|--------------|
| 11 | 4 | 0 |
| Correct | Incorrect | Not Answered |

Questions testing your knowledge of words (synonyms) and your ability to relate ideas (analogies)

Quantitative 58th Percentile

Your Score
490

Average 3rd Grade Score 475

If taken multiple times, your score would fall between: 470 - 510

| | | | | | |
|-----------------|-----------|--------------|----------------|--|--|
| Total Items: 30 | | | Not Reached: 0 | | |
| 21 | 9 | 0 | | | |
| Correct | Incorrect | Not Answered | | | |

Number Concepts & Operations Total: 14

| | | |
|---------|-----------|--------------|
| 8 | 6 | 0 |
| Correct | Incorrect | Not Answered |

Algebra, Geometry & Other Total: 16

| | | |
|---------|-----------|--------------|
| 13 | 3 | 0 |
| Correct | Incorrect | Not Answered |

Questions testing your knowledge of number properties and relationships, basic computation, concepts of equivalencies, geometry, measurement, and interpretation of charts/graphs

Reading 70th Percentile

Your Score
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| | | | | | |
|-----------------|-----------|--------------|----------------|--|--|
| Total Items: 28 | | | Not Reached: 0 | | |
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| Correct | Incorrect | Not Answered | | | |

Reading Main Idea & Content Total: 19

| | | |
|---------|-----------|--------------|
| 12 | 7 | 0 |
| Correct | Incorrect | Not Answered |

Reading Higher Order & Interpretation Total: 9

| | | |
|---------|-----------|--------------|
| 7 | 2 | 0 |
| Correct | Incorrect | Not Answered |

Questions regarding the main idea and supporting details of a passage or requiring higher order skills, such as deriving the meaning of words from context, extracting the meaning of a passage, or interpreting an author's logic, attitude and tone

How to Interpret Your Scores

How are my scores calculated?

Upper Level and Middle Level SSAT: Scores are calculated by awarding one point for each correct answer and subtracting one-quarter of one point for each incorrect answer.

Elementary Level SSAT: Scores are calculated by awarding one point for each correct answer and zero points for each incorrect answer. * All scores are scaled scores.

What is a score range?

We provide a score range to emphasize the possibility of small score differences if you had taken a different edition of the test instead of the one you took, accounting for changes in difficulty and different editions of the test. A statistical procedure called "equating" is used to adjust for these differences. Even after these adjustments, no single test score provides a perfectly accurate estimate of your proficiency.

For more information about the SSAT and to take a free practice test, please visit our website: www.ssat.org/practice.

What does "Not Answered" mean?

Questions not answered include both skipped questions and questions not reached. The number of Correct, Incorrect, Not Reached, or Not Answered questions should not be compared between different test takers. The number of Correct, Incorrect, Not Reached, or Not Answered not only depends on the test taker's ability but also depends on the difficulty of the questions.

What do percentiles mean?

SSAT percentiles have a range from 1 to 99, indicating that your scaled score was equal to or higher than the percentage of other test takers shown. If you are concerned that your percentile is lower than other scores, that may be because SSAT test takers are a small and highly competitive group of students who plan to go to the world's best independent schools.

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Interpreting SSAT Scores

Raw Scores

On the Elementary Level test, a *raw score* is the number of questions answered correctly.

Scaled Scores

The raw score is converted to a score on the 300-to-600 Elementary Level scale, which is called the *scaled score*. This is the score that appears on the student's score report. The scaled score yielded by a raw score can vary slightly from one edition of the test to another. This is due to small differences in difficulty among different editions. A statistical procedure called "equating" is used to adjust for these small differences. See "Score Equating" on page 15 for more details.

Range of Scaled Scores

In reality, a perfectly reliable test is never realized. Standard Error of Measurement (SEM) measures how a student's official observed test scores vary from his or her "true" scores (see "True Score" on page 17). This is why ranges of scaled scores are provided in the score reports, to emphasize the possibility of score differences due to SEM. See "Standard Error of Measurement" on page 17 for more details.

The crucial use of the SEM is to treat each scaled score as a band rather than as a point when using scores to make decisions about test takers. It is a common practice to extend the band one SEM above the obtained score and one SEM below the obtained score. For example, the SEM of the Elementary Level test is 20 for the verbal section. If a student gets a scaled score of 500 on the verbal section, there is a 68% chance that his/her score will fluctuate between 480 and 520 if he or she takes the test again.

Norms and Percentiles

The SSAT is a norm-referenced test. A *norm-referenced* test interprets an individual test taker's score relative to the distribution of scores for a comparison group, referred to as the norm group. The SSAT Elementary Level test norm group consists of all first-time test takers (same grade level) who took the test typically within the past three academic years in the U.S. and Canada. For students who tested multiple times, only the first test scores are used to calculate the ranking percentile.

The SSAT reports percentiles. The percentile is the percentage of students in the norm group whose scores fall at or below a particular scaled score. For example, if a 3rd grade student's scaled score is 520 and the percentile is 73 on the verbal section, it means that 73% of scores of all the other 3rd grade students (who took the test over the past three academic years) fell at or below 520.

Tables 1 and 2 (pages 20 and 21) provide percentile ranks for grades 3 and 4, respectively.





Average Scores

The average of a group of scores provides a useful reference point when considering an individual score (e.g., above average, below average) for a test taker's grade. The average scores shown are for all first-time test takers testing in the U.S. and Canada over a three-year period of the same grade as the reported test taker. For students who tested multiple times, only the first test scores are used to calculate the average score.

Number of Right, Wrong, and Not Answered for Subject Areas

For each subject area, the report provides:

- + The number of questions answered correctly
- + The number of questions answered incorrectly
- + The number of questions omitted
- + The number of questions not reached at the end of each test section

It is recommended that schools use this information to understand a child's scores in more depth. For instance, a low reading comprehension score could indicate either a reading problem or a slower reading speed. A score report may reflect the latter in the number of items not reached as compared to the total number of questions omitted in the entire section.

School-Specific Context Data

Context is a key component to effective interpretation of test scores. The most important context for interpretation of test scores and other information is your school; thus your school's context data is added to each test taker's SSAT score report if your school reports its accepted and enrolled data to The Enrollment Management Association. The contexts included on the school score report place the test taker's scores into the school's environment, providing a much more meaningful comparison. School score reports are specific to each school and include context data for that school.

School Context: All 2020-21 Reports

This table places the test taker's scores in the context of all of the same-grade test takers who sent scores to your school in the last admission year. The reported test taker's scores can be compared directly with those of all of the same-grade test takers' scores received by your school last year. Also shown are the mean (average) scores for all of the same-grade test takers whose scores your school received in the last admission year.

School Context: 2021 Accepted Students

This table places the test taker's scores in the context of all scores of the same-grade test takers accepted by your school in the last admission year. Also shown are the average scores for all of the same-grade test takers accepted by your school in the last admission year. (If your school does not participate in the Applicant Comparison Data share, these fields are blank.)

School Context: 2021 Enrolled Students

This table places the test taker's scores in the context of all of the same-grade test takers enrolled by your school in the last admission year. Also shown are the average scores for all of the same-grade test takers enrolled by your school in the last admission year. (If your school does not participate in the Applicant Comparison Data share, these fields are blank.)





SSAT Subject Areas

SSAT results are reported in the following subject areas:

Verbal

- + Synonyms — These questions assess a student’s ability to select the one word or phrase that is closest in meaning to the word given.
- + Analogies — These questions assess a student’s ability to find relationships between words.

Quantitative

- + Number Concepts and Operations — These questions cover addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals; rounding, place value, estimation, and properties; odd, even, positive, negative, and prime numbers; and ratios and proportions.
- + Algebra, Geometry, and Other Math — These questions deal with describing and extending patterns; equalities and inequalities; shapes, line segments, and angles; linear measure, area, and perimeter; reading and interpreting graphs and tables; weight, capacity, time, temperature, and money; as well as logic, data analysis, and probability.

Reading Comprehension

- + Reading Main Ideas and Content — Some of these questions require a student to use specific details that are stated in the passage to identify main ideas and/or provide answers to questions relating to “who,” “what,” “where,” “when,” “why,” and “how.” Other questions ask the student to use context clues to determine the meaning of a specific word or phrase and choose the correct definition or synonym.
- + Reading Higher Order and Interpretation — These questions require the student to make predictions, conclusions, and inferences about the behaviors and motives of the author and of the characters depicted in that passage using implicit information from the passage or drawing on the information contained in the passage.





Statistical Terms and the SSAT

Score Equating

Different SSAT forms are built and administered to students each year. Although test developers follow prescribed specifications when they assemble new forms so that different forms can be parallel in difficulty as much as possible, in reality it is inevitable that there are variations in form difficulty. A statistical procedure referred to as *score equating* is used to adjust for minor form difficulty differences, so that scores reported to students taking different forms are comparable.

Mean

The *mean* of a group of scores is the arithmetic average. Computing the mean is a useful way to determine the average of a group for most kinds of measurement. The mean becomes a more useful and reliable measure as the size of the group upon which it is based increases. It is determined by adding the scores and dividing by the number of scores in that group.



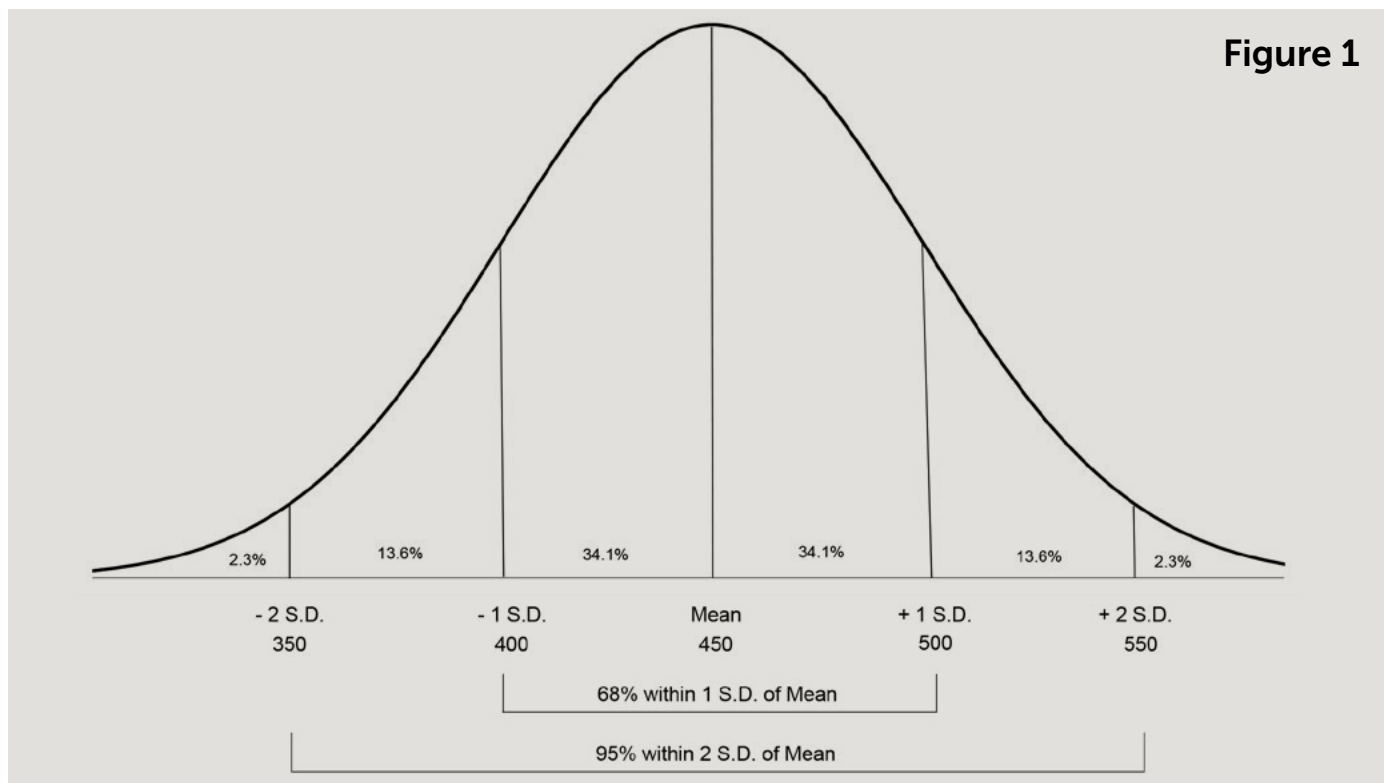


Standard Deviation

The *standard deviation* is a statistic that indicates how much variation exists in a set of scores. A group with many high scores and many low scores will have a large standard deviation. A group of scores that are all close together will have a small standard deviation. If a group of scores has a normal distribution (the familiar bell-shaped curve), as is the case for national norm groups on many tests, about 68% of scores will fall within one standard deviation of the mean. About 16% of the scores will be more than one standard deviation below the mean score, and about 16% will be more than one standard deviation above the mean.

Figure 1 illustrates the relationship between standard deviation and test scores. The mean score for this test is 450 and the standard deviation is 50 points. One standard deviation above the mean is a score of 500, and 34% of the test-taking population earn scores that are between 450 and 500. Similarly, another 34% of the population score within one standard deviation below the mean, or between 400 and 450. This means that 68% of the test-taking population score within one standard deviation (50 points) above or below the mean score (450), or between 400 and 500. More than 13% score between one and two standard deviations above or below the mean, so a total of 95% of the test takers score within two standard deviations of the mean, or between 350 and 550. Notice that less than 5% of test takers score more than two standard deviations above or below the mean.

An understanding of how means and standard deviations are related can help you to compare how students perform relative to the entire test-taking population and may help you to identify those who are “average,” “above/below average,” or “exceptional” in either direction. You may be aware that a score of 570 on the reading comprehension section is very good. However, when you consult Figure 1, you will see that such a score is greater than two standard deviations above the mean and that you have before you a student who has scored in the top 2% of all test takers.





Reliability of Test Scores

Reliability is the tendency of test scores to be consistent on two or more occasions of testing if there is no real change in the test taker's abilities. Most concern focuses on reliability as it involves the specific questions that a student answers. As the questions on a particular test represent a mere sample of the many questions that could possibly have been included, one must consider how closely the test results agree with the results that would have been produced by a different set of similar questions.

For scaled scores, a reliability coefficient of 1.00 indicates perfect reliability; a coefficient of .00 indicates no reliability at all. The Elementary Level SSAT tests have reliability coefficients ranging between .74 and .87.

Standard Error of Measurement (SEM)

Standard Error of Measurement (SEM) does not mean that someone has made a mistake in administering or scoring the test. It only means that students' scores on a test tend to differ somewhat from the scores they would earn if the test were perfectly reliable (true score). In reality, however, a perfectly reliable test is never realized. Standard Error of Measurement (SEM) measures how a student's test scores vary from his or her "true score" (see "True Score" below).

The crucial use of the SEM is to treat each scaled score as a band rather than as a point when using scores to make decisions about test takers. It is a common practice to extend the band one SEM above the obtained score and one SEM below the obtained score. For example, the SEM of the Elementary Level test is 20 on verbal. If a student gets a scaled score of 500 on verbal, there is a 68% chance that his/her score will fluctuate between 480 (one SEM below 500) and 520 (one SEM above 500) if he or she takes the test again.

Standard Error of Difference (SED)

Because test scores are not perfect measures of ability, we expect an examinee's scores to differ if the person takes the test more than once (see "Standard Error of Measurement" above). In the same way, we should expect the scores of two examinees of equal ability to differ. The *Standard Error of Difference (SED)* is an index of the average-sized difference that we would expect between test scores of two examinees of equal ability. If the test scores of two examinees differ by less than the SED, there is no substantial evidence that the two examinees differ in ability. If the test scores differ by an amount greater than the SED (say, 1.5 times the SED), then we may have confidence that the two individuals truly differ in ability as measured by the test.

The SED is calculated as $\sqrt{2} \times SEM$. For example, the SEM of the Elementary Level test is 20 points on verbal. The SED is roughly 30 points. If two individuals' verbal scores differ by more than 45 points (1.5 times the SED), then we may have confidence that the two individuals truly differ in their verbal abilities as measured by the SSAT.

True Score

True score is a hypothetical concept indicating what an individual's score on a test would be if the test were perfectly reliable. It is thought of as the hypothetical average of an infinite number of obtained scores for a test taker with the effect of practice removed.





Validity

Test *validity* refers to the degree to which evidence exists to support the interpretation of test scores for particular purposes. It is important to note that we validate a test score for a particular use (e.g., admission, placement) and that validity is not the property of a test in and of itself. This means that as opposed to talking about a test as simply valid or not valid, one should instead state, for example, "There is a great deal of validity evidence to support the use of SSAT scores for independent school admission decisions." This also represents the notion that validity is a matter of degree and not absolute. It is therefore very important to gather validity evidence over time to either enhance, confirm, or contradict previous findings.

There are various sources of validity evidence that can be examined, such as the content tested (e.g., subject area and types of items), the internal structure of the test (e.g., reliability and other psychometric properties), and relationships between the test scores and other variables (e.g., correlations with the outcomes the test is expected to predict).





Appendices

Appendix A:

SSAT Percentiles, by Grade, of Elementary Level Test

The norms presented in the following tables are based on first-time Elementary Level test takers who tested between August 1, 2017, and July 31, 2020. They are not representative of students in general throughout the country, nor are they representative of all students enrolled in independent secondary schools.

Percentiles reported on individual score report forms are based on the performance of students of the same grade and may be found in the following tables. EMA now provides only scores based on mixed gender scores.

Guide to Reading Tables

| | |
|------------------------------------|----------|
| Verbal | V |
| Quantitative | Q |
| Reading Comprehension | R |



Table 1**PERCENTILE RANKS ON THE SSAT****3rd GRADE — VERBAL, QUANTITATIVE, READING, AND TOTAL**

Based on United States and Canadian First-Time Test Takers August 2017–July 2020

| Scaled Score | SSAT Percentile | | | Scaled Score | Percentile Total | Scaled Score | Percentile Total | Scaled Score | Percentile Total |
|--------------|-----------------|----|----|--------------|------------------|--------------|------------------|--------------|------------------|
| | V | Q | R | | | | | | |
| 600 | 99 | 99 | 99 | 1800 | 99 | 1490 | 58 | 1190 | 13 |
| 590 | 98 | 97 | 98 | 1790 | 99 | 1480 | 57 | 1180 | 11 |
| 580 | 96 | 91 | 96 | 1780 | 99 | 1470 | 56 | 1170 | 10 |
| 570 | 91 | 85 | 92 | 1770 | 99 | 1460 | 53 | 1160 | 9 |
| 560 | 86 | 77 | 89 | 1760 | 98 | 1450 | 52 | 1150 | 8 |
| 550 | 80 | 76 | 82 | 1750 | 98 | 1440 | 50 | 1140 | 8 |
| 540 | 76 | 72 | 81 | 1740 | 97 | 1430 | 49 | 1130 | 7 |
| 530 | 70 | 70 | 76 | 1730 | 96 | 1420 | 47 | 1120 | 6 |
| 520 | 67 | 67 | 73 | 1720 | 95 | 1410 | 46 | 1110 | 5 |
| 510 | 63 | 65 | 70 | 1710 | 93 | 1400 | 44 | 1100 | 4 |
| 500 | 57 | 60 | 64 | 1700 | 92 | 1390 | 43 | 1090 | 3 |
| 490 | 53 | 58 | 59 | 1690 | 91 | 1380 | 40 | 1080 | 3 |
| 480 | 48 | 54 | 54 | 1680 | 89 | 1370 | 39 | 1070 | 2 |
| 470 | 44 | 49 | 50 | 1670 | 88 | 1360 | 37 | 1060 | 2 |
| 460 | 40 | 49 | 45 | 1660 | 86 | 1350 | 36 | 1050 | 2 |
| 450 | 36 | 44 | 41 | 1650 | 85 | 1340 | 34 | 1040 | 1 |
| 440 | 31 | 39 | 37 | 1640 | 84 | 1330 | 33 | 1030 | 1 |
| 430 | 28 | 35 | 32 | 1630 | 83 | 1320 | 31 | 1020 | 1 |
| 420 | 23 | 33 | 26 | 1620 | 81 | 1310 | 30 | 1010 | 1 |
| 410 | 20 | 30 | 22 | 1610 | 80 | 1300 | 28 | 1000 | 1 |
| 400 | 17 | 26 | 18 | 1600 | 78 | 1290 | 27 | 990 | 1 |
| 390 | 15 | 21 | 14 | 1590 | 77 | 1280 | 26 | 980 | 1 |
| 380 | 11 | 17 | 11 | 1580 | 74 | 1270 | 25 | 970 | 1 |
| 370 | 8 | 13 | 8 | 1570 | 72 | 1260 | 24 | 960 | 1 |
| 360 | 6 | 10 | 4 | 1560 | 71 | 1250 | 22 | 950 | 1 |
| 350 | 4 | 6 | 3 | 1550 | 69 | 1240 | 20 | 940 | 1 |
| 340 | 2 | 3 | 1 | 1540 | 67 | 1230 | 19 | 930 | 1 |
| 330 | 1 | 1 | 1 | 1530 | 65 | 1220 | 18 | 920 | 1 |
| 320 | 1 | 1 | 1 | 1520 | 64 | 1210 | 16 | 910 | 1 |
| 310 | 1 | 1 | 1 | 1510 | 62 | 1200 | 14 | 900 | 1 |
| 300 | 1 | 1 | 1 | 1500 | 60 | | | | |



Table 2

PERCENTILE RANKS ON THE SSAT

4th GRADE — VERBAL, QUANTITATIVE, READING, AND TOTAL

Based on United States and Canadian First-Time Test Takers August 2017–July 2020

| Scaled Score | SSAT Percentile | | | Scaled Score | Percentile Total | Scaled Score | Percentile Total | Scaled Score | Percentile Total |
|--------------|-----------------|----|----|--------------|------------------|--------------|------------------|--------------|------------------|
| | V | Q | R | | | | | | |
| 600 | 99 | 99 | 99 | 1800 | 99 | 1490 | 60 | 1190 | 11 |
| 590 | 99 | 97 | 98 | 1790 | 99 | 1480 | 58 | 1180 | 10 |
| 580 | 94 | 92 | 97 | 1780 | 99 | 1470 | 56 | 1170 | 9 |
| 570 | 86 | 86 | 95 | 1770 | 99 | 1460 | 55 | 1160 | 8 |
| 560 | 82 | 80 | 93 | 1760 | 99 | 1450 | 53 | 1150 | 7 |
| 550 | 77 | 73 | 88 | 1750 | 98 | 1440 | 51 | 1140 | 6 |
| 540 | 75 | 70 | 86 | 1740 | 97 | 1430 | 50 | 1130 | 5 |
| 530 | 71 | 68 | 81 | 1730 | 96 | 1420 | 48 | 1120 | 5 |
| 520 | 70 | 66 | 74 | 1720 | 96 | 1410 | 46 | 1110 | 4 |
| 510 | 65 | 64 | 69 | 1710 | 94 | 1400 | 45 | 1100 | 3 |
| 500 | 62 | 61 | 64 | 1700 | 93 | 1390 | 43 | 1090 | 2 |
| 490 | 57 | 58 | 57 | 1690 | 91 | 1380 | 41 | 1080 | 2 |
| 480 | 54 | 56 | 52 | 1680 | 89 | 1370 | 39 | 1070 | 2 |
| 470 | 50 | 51 | 45 | 1670 | 88 | 1360 | 38 | 1060 | 1 |
| 460 | 46 | 49 | 42 | 1660 | 86 | 1350 | 36 | 1050 | 1 |
| 450 | 39 | 46 | 36 | 1650 | 85 | 1340 | 34 | 1040 | 1 |
| 440 | 36 | 40 | 33 | 1640 | 84 | 1330 | 32 | 1030 | 1 |
| 430 | 32 | 35 | 27 | 1630 | 83 | 1320 | 31 | 1020 | 1 |
| 420 | 28 | 32 | 22 | 1620 | 81 | 1310 | 29 | 1010 | 1 |
| 410 | 23 | 26 | 18 | 1610 | 79 | 1300 | 27 | 1000 | 1 |
| 400 | 20 | 19 | 15 | 1600 | 78 | 1290 | 25 | 990 | 1 |
| 390 | 17 | 12 | 12 | 1590 | 77 | 1280 | 24 | 980 | 1 |
| 380 | 14 | 6 | 9 | 1580 | 75 | 1270 | 22 | 970 | 1 |
| 370 | 11 | 3 | 7 | 1570 | 73 | 1260 | 20 | 960 | 1 |
| 360 | 9 | 1 | 4 | 1560 | 72 | 1250 | 19 | 950 | 1 |
| 350 | 6 | 1 | 3 | 1550 | 71 | 1240 | 18 | 940 | 1 |
| 340 | 4 | 1 | 1 | 1540 | 69 | 1230 | 17 | 930 | 1 |
| 330 | 2 | 1 | 1 | 1530 | 67 | 1220 | 15 | 920 | 1 |
| 320 | 1 | 1 | 1 | 1520 | 66 | 1210 | 14 | 910 | 1 |
| 310 | 1 | 1 | 1 | 1510 | 64 | 1200 | 13 | 900 | 1 |
| 300 | 1 | 1 | 1 | 1500 | 62 | | | | |





Appendix B:

SSAT Means and Standard Deviations

The means and standard deviations on the following table is based on first-time Elementary Level test takers who tested from August 1, 2017, through July 31, 2020. If a student tested multiple times, only the first test scores were used to calculate the means. They are not representative of students in general throughout the country, nor are they representative of all students enrolled in independent secondary schools. EMA now provides only scores based on mixed gender scores.



Table 1**MEANS AND STANDARD DEVIATIONS ON THE SSAT**

Based on United States and Canadian First Time-Test Takers August 2017–July 2020

| Verbal | Elementary | |
|--------------------|-------------------|-----------|
| Grade | 03 | 04 |
| Total Test Takers | 1159 | 2312 |
| Mean Scaled Score | 483 | 477 |
| Standard Deviation | 71 | 76 |

| Quantitative | Elementary | |
|---------------------|-------------------|-----------|
| Grade | 03 | 04 |
| Total Test Takers | 1159 | 2312 |
| Mean Scaled Score | 475 | 481 |
| Standard Deviation | 81 | 74 |

| Reading | Elementary | |
|--------------------|-------------------|-----------|
| Grade | 03 | 04 |
| Total Test Takers | 1159 | 2312 |
| Mean Scaled Score | 475 | 477 |
| Standard Deviation | 68 | 63 |

| Total | Elementary | |
|--------------------|-------------------|-----------|
| Grade | 03 | 04 |
| Total Test Takers | 1159 | 2312 |
| Mean Scaled Score | 1433 | 1435 |
| Standard Deviation | 192 | 185 |

*Standard administrations and scheduled Flex administrations.





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