The **SSAT** 

2017-2018

# 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 a 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 exams 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., 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 of the 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 students have 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 web site: www.ssat.org/TA.

# Reporting SSAT Scores

There are two types of test administrations for which scores are reported—Standard test administrations (six per 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 on the day that they are scored.

#### **Score Reports**

The SSAT score report is available to schools, educational consultants, and educational organizations. Parents, guardians, students, or advisors 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.

There are a number of SSAT score reporting procedures. 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 schools's submission of data on accepted and enrolled students. For the 2017-2018 year, the scores of a test taker are placed in many different contexts on the school score report



### **School Score Report Sample**

## **Elementary SSAT Score Report**

The SSAT

Student Name ssat, Vani SchoolID Registration Number Family Address 4462 160516096 456 Millstone Road Family Phone #

South Plainfield IA 04532 Family Email 565-787-3434 vkonkimalla@ssat.org Test Date Test Center ID

Test Level 06 Apr 2016 Current Grade 5902 Gender Elementary Birth Date Female

	Test Taker's Scores		4	Fema	ale 12	2 Aug 2006		
	Possible Scale	ed Score Range: 0-600	SSAT Reference Information					
Verbal	Score	Range	Student Percentile	4 Total		Female		
Quantitative	440	420 - 460 400 - 440	35	Average Score 479	Student Percentile 35	m stage Score		
Reading Total	410 1270	390 - 430	33 15	469	39	<u>480</u> 457		
	1270	Applicant Con	23	478 1426	14 25	479		

Applicant Comparison Data for 4462 (Grade 4) 1416 All 2016-2017 Reports 2017 Accepted Students Rank Order 2017 Enrolled Students Verbal Rank Order Quantitative **Rank Order** Reading Total Verbal Average Score **Average Score** Quantitative Average Score Reading Total Applicant Comparison Data ranks the scores in this report among all grade 4 score reports sent to your school in the previous year, 2016-2017.

N/A indicates that data has not been submitted for your school; please contact members@enrollment.org for more information.

			at those informat	tion.	
	N. Dialet	lumber of Qu	uestions	Percent Correct	
Verbal Synonyms	Right	Wrong	Not Answered		Percent Correct
Verbal Analogies	6	9	0	Right/Total	Right/Answered
Verbal Questions Not Reached: 0	11	4	0	40 %	40 %
Number Concepts and Operations			Ü	73 %	73 %
Algebra, Geometry and Other Math	3	7	0		, , ,
Quantitative Questions Not Reached: 0	8	12	0	30 %	30 %
Reading Main Idea and Content			U	40 %	40 %
Reading Higher Orders	6	5			TO /U
Reading Higher Order and Interpretation	7	10	0	55 %	55 %
Reading Questions Not Reached: 0			0	41 %	· -
Questions not answered include both omitted questions and questions are test taker or between different test to	estions not reac!	hed Tho purch	(m. )		41 %

Questions not answered include both omitted questions and questions not reached. The number of Right, Wrong, and Not Answered questions should NOT be compared across different forms, for the same test taker or between different test takers. The number of Right, Wrong, and Not Answered questions not only depends on a test taker's ability, but also depends on the difficulty of the questions. Hence, score equating is used to adjust the form difficulty differences, and the resulting scaled scores can be compared across forms.



### **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.

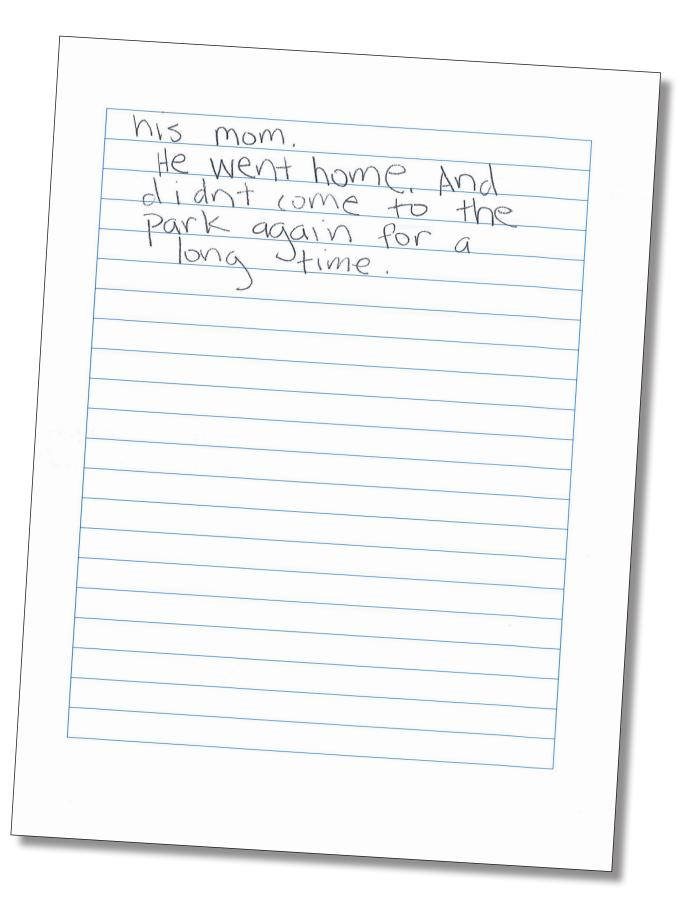
The children were playing in the park when the bubble man came for the show.

Every body came running over to see the show. There were lots of big bubbles, were lots of big bubbles, he missed and fell down.

He missed and fell down.

He started to criends came over to take him to







### **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. The

# Secondary School Admission Test Score Report

SSAT

#### **About You**

Grade Vani ssat

Date of Birth Gender 12 Aug 2006 Female

#### The Test You Took

Test Date Registration ID 06 Apr 2016 160516096 Test Center

Test Level Princeton Day School (5902)

Elementary

Elementary				SSAT Reference	e Information	
	Your Scale	d Scores	Grade 4		Grade 4	
Verbal	Possible Scaled 300- Score 440	Range 420 - 460	Your Percentile 35 33	Average Score 479 469	Your Percentile 35 39	480 457 479
Quantitative Reading	420 410 1270	390 - 430	15 23 What Do N	478 1426 My SSAT Percentiles Mea	25 nn?	1416

### What is my Scaled Score, and Why Do I have a Personal Score Range?

Scores are first calculated by awarding one point for each correct and zero points for each omitted or incorrect answer. These scores are called raw scores. Raw scores can vary from one edition of or incorrect answer. These scores are called raw scores. Raw scores can vary from one edition of the test to another due to differences in difficulty among different editions. A statistical procedure the test to another due to differences in difficulty among different ethese adjustments, no single called "equating" is used to adjust for these differences. Even after these adjustments, no single called "equating" is used to adjust for these differences. Even after these adjustments, no single reads to the provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides a perfectly accurate estimate of your proficiency. Therefore, we provide a score test score provides and the provides are provided and the provides are provided as a score test score provides are provided as a score provided and the provides are provided as a score provided and the provided as a score provided and the provided as a score prov

Vani ssat 456 Millstone Road

South Plainfield, IA 04532

What DO My SSAT Percentiles Mean?

Your SSAT percentiles have a range of 1 to 99, indicating the percentage of other test takers who scored at or below your scaled score. The first SSAT percentile compares your performance to the performances of all other students in the same grade level who have taken the test in the last three years. The second SSAT percentile compares your performance to the performance of other years. The second SSAT percentile compares your performance to the performance of other years. If you students of the same grade and gender who have taken the SSAT within the past three years. If you are concerned that your percentiles are lower than you have earned on other tests, please are concerned that SSAT test takers are members of a small and highly competitive group of students who plan to attend some of the world's best independent schools. You should not be discouraged by what seems to be a lower percentile than you usually attain on standardized tests.

eems to be a lowe	Right 6 11	Wrong 9 4	Not Answered  0 0	% Correct 40 73
		-		
	11	4	0	73
				57
oncepts &	3	7	0	30
s Geometry & Ch	8	12	0	40
	6	5	0	55
rder	7	10	0	41 46
)	a Order	order 7	a 7 10	a 6 5 0

Questions not answered include both omitted questions and questions not reached. The number of Right, Wrong, and Not Answered questions should NOT be compared across different forms, for the same test taker or between different test takers. The number of Right, Wrong, and Not Answered questions not only depends on a test taker's ability, but also depends on the difficulty of the questions. Hence, score equating is used to adjust the form difficulty differences, and the resulting scaled scores can be compared across forms.



# **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 18). 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 and same grade and gender) who took the test during 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 during the past three academic years) fell at or below 520.

The two sets of SSAT percentiles are different because the test taker's scores are being compared with two different groups of test takers. Grade-only and grade-and-gender percentiles vary by competitive group, while the scaled scores are constant.

Table 1A to 1B (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 and gender. The average scores shown are for all first-time test takers testing in the U.S. and Canada over the most recent three-year period of the same grade and the same grade and gender 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 (for school reports only)

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 2016-17 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: 2017 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: 2017 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 Assess a student's ability to select the one word or phrase that is closet in meaning to the word given.
- + Analogies 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, Measurement 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.



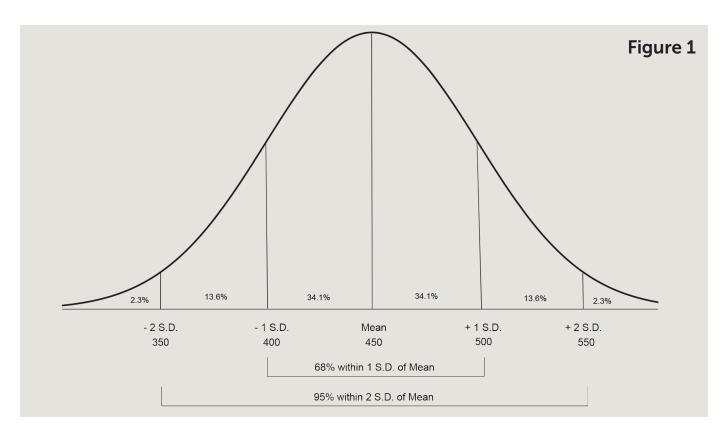


#### **Standard Deviation**

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 that 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 takers' 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 SSAT Elementary Level test is 20 points on verbal. The SED is roughly 30 points. If two individuals' verbal scores differ greater than 45 points (1.5 times the SED), then we may have confidence that the two individuals truly differ in their verbal abilities 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).

The Enrollment Management Association can conduct a validity study for individual schools with school specific data provided by the school. This service is available for member schools for a fee of \$500.





# **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, 2014 and July 31, 2017. 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 of the same grade level and gender and may be found in the following tables..

#### **Guide to Reading Tables**

Verbal	<i></i>
Quantitative	G
Reading Comprehension	т





#### Table 1A

#### PERCENTILE RANKS ON THE SECONDARY SCHOOL ADMISSION TEST

3rd GRADE - VERBAL, QUANTITATIVE, AND READING

Scaled Score SSAT Percentile Female			SSAT Percentile Male			SSAT Percentile Total			
Score	V	Q	R		Q	R	V	Q	R
600	99	99	99	99	99	99	99	99	99
590	99	99	99	98	99	99	99	99	99
580	97	96	97	96	95	97	96	96	97
570	93	93	95	92	87	95	92	90	95
560	89	88	89	87	78	88	88	82	88
550	85	87	87	81	76	85	83	80	86
540	82	85	84	78	71	81	80	77	82
530	81	84	78	75	70	73	78	76	75
520	77	82	78	71	66	73	74	72	75
510	70	80	70	65	63	64	67	70	67
500	70	76	68	65	57	62	67	65	65
490	64	71	64	59	53	56	61	61	60
480	61	67	58	55	50	48	58	57	52
470	58	61	58	51	44	48	54	51	52
460	50	57	50	45	41	42	47	47	46
450	50	55	43	44	39	35	46	45	38
440	45	49	41	38	34	32	41	41	36
430	39	44	35	31	30	28	34	36	31
420	32	40	27	28	27	23	30	33	25
410	30	38	22	26	25	18	28	31	20
400	25	30	17	22	19	15	23	24	16
390	22	26	14	19	16	12	20	20	13
380	16	21	12	15	12	9	15	16	10
370	11	16	9	12	9	7	12	12	8
360	8	13	5	8	6	5	8	9	5
350	6	7	4	6	4	3	6	5	3
340	3	5	2	4	2	1	4	3	1
330	2	2	1	2	1	1	2	1	1
320	1	1	1	1	1	1	1	1	1
310	1	1	1	1	1	1	1	1	1
300	1	1	1	1	1	1	1	1	1





#### **Table 1B**

#### PERCENTILE RANKS ON THE SECONDARY SCHOOL ADMISSION TEST

**3RD GRADE - TOTAL SCALED SCORES** 

Total			
Scaled Score	Female TOTAL	Male TOTAL	Total TOTAL
1800	99	99	99
1790	99	99	99
1780	99	99	99
1770	99	99	99
1760	99	99	99
1750	99	99	99
1740	98	97	98
1730	98	97	97
1720	98	96	97
1710	98	95	96
1700	97	94	95
1690	96	92	94
1680	95	90	92
1670	93	89	91
1660	92	88	90
1650	91	87	89
1640	90	86	88
1630	88	84	86
1620	88	82	85
1610	88	81	84
1600	86	79	82
1590	85	78	81
1580	84	77	80
1570	82	75	78
1560	81	73	76
1550	80	71	75
1540	78	70	73
1530	76	68	71
1520	75	65	69
1510	73	63	67
1500	71	61	65

Total			
Scaled Score	Female TOTAL	Male TOTAL	Total TOTAL
1490	70	58	63
1480	69	57	62
1470	67	55	60
1460	66	53	58
1450	65	50	56
1440	63	48	54
1430	61	46	52
1420	59	44	50
1410	57	43	49
1400	55	41	47
1390	53	39	45
1380	52	38	44
1370	50	37	42
1360	48	35	40
1350	46	34	39
1340	43	33	37
1330	41	32	36
1320	40	30	34
1310	39	28	33
1300	37	27	31
1290	35	26	30
1280	34	25	29
1270	32	23	27
1260	29	21	24
1250	27	19	23
1240	25	18	21
1230	22	16	19
1220	22	15	18
1210	20	13	16
1200	18	12	15

Total			
Scaled Score	Female TOTAL	Male TOTAL	Total TOTAL
1190	16	11	13
1180	15	11	12
1170	14	10	12
1160	12	9	10
1150	10	8	9
1140	9	7	8
1130	8	7	7
1120	6	6	6
1110	6	5	5
1100	5	4	4
1090	4	3	4
1080	4	3	4
1070	3	2	3
1060	2	2	2
1050	2	2	2
1040	2	2	2
1030	1	1	1
1020	1	1	1
1010	1	1	1
1000	1	1	1
990	1	1	1
980	1	1	1
970	1	1	1
960	1	1	1
950	1	1	1
940	1	1	1
930	1	1	1
920	1	1	1
910	1	1	1
900	1	1	1





#### Table 1B PERCENTILE RANKS ON THE SECONDARY SCHOOL ADMISSION TEST

4th GRADE - VERBAL, QUANTITATIVE, AND READING

Scaled	S	SSAT Percentile Female					Э		
Score	V	Q	R	V	Q	R	V	Q	R
600	99	99	99	99	99	99	99	99	99
590	99	98	99	99	99	99	99	99	99
580	95	97	99	94	97	99	95	97	99
570	84	94	96	86	90	98	85	92	97
560	81	89	94	83	82	96	82	86	95
550	76	84	88	78	76	92	77	80	90
540	76	82	86	78	74	89	77	78	88
530	68	79	80	71	69	84	70	74	82
520	68	79	74	71	67	78	70	73	76
510	63	77	68	63	64	71	63	70	70
500	60	74	63	61	61	64	60	67	64
490	56	73	57	54	59	58	55	65	58
480	54	69	51	52	56	51	53	62	51
470	49	66	45	48	50	45	48	58	45
460	46	60	42	45	45	41	45	52	42
450	40	60	35	39	43	34	40	51	34
440	38	52	31	36	35	30	37	43	31
430	34	46	26	31	30	24	33	37	25
420	30	40	22	28	25	19	29	32	21
410	26	31	16	24	20	16	25	25	16
400	22	26	13	21	16	15	21	21	14
390	19	19	10	19	9	12	19	14	11
380	15	11	7	16	5	10	15	8	8
370	11	4	6	12	2	7	11	3	7
360	8	2	4	9	1	6	9	1	5
350	6	2	3	7	1	2	7	1	2
340	5	1	1	6	1	1	5	1	1
330	3	1	1	3	1	1	3	1	1
320	2	1	1	3	1	1	3	1	1
310	1	1	1	1	1	1	1	1	1
300	1	1	1	1	1	1	1	1	1



#### Table 2B

#### PERCENTILE RANKS ON THE SECONDARY SCHOOL ADMISSION TEST

4TH GRADE - TOTAL SCALED SCORES

Total			
Scaled Score	Female TOTAL	Male TOTAL	Total TOTAL
1800	99	99	99
1790	99	99	99
1780	99	99	99
1770	99	99	99
1760	99	99	99
1750	98	99	99
1740	98	99	99
1730	98	99	98
1720	97	98	97
1710	96	97	96
1700	94	95	95
1690	93	94	93
1680	92	93	92
1670	91	91	91
1660	90	90	90
1650	89	89	89
1640	87	87	87
1630	86	86	86
1620	84	84	84
1610	83	82	83
1600	81	80	81
1590	81	79	80
1580	79	77	78
1570	78	76	77
1560	77	74	75
1550	75	72	74
1540	74	70	72
1530	72	68	70
1520	70	66	68
1510	68	64	66
1500	66	62	64

Total			
Scaled Score	Female TOTAL	Male TOTAL	Total TOTAL
1490	64	60	62
1480	63	59	61
1470	61	57	59
1460	60	55	57
1450	58	53	55
1440	56	51	53
1430	55	48	52
1420	54	45	49
1410	52	44	47
1400	49	42	45
1390	47	40	44
1380	46	39	42
1370	44	36	40
1360	42	35	38
1350	40	34	37
1340	38	31	34
1330	36	29	32
1320	34	27	31
1310	32	26	29
1300	30	24	27
1290	29	22	26
1280	27	21	24
1270	26	20	23
1260	24	19	21
1250	22	18	20
1240	20	17	19
1230	19	16	17
1220	18	14	16
1210	16	14	15
1200	15	12	13

Total			
Scaled Score	Female TOTAL	Male TOTAL	Total TOTAL
1190	13	11	12
1180	11	10	11
1170	10	9	9
1160	9	8	9
1150	8	8	8
1140	7	7	7
1130	6	6	6
1120	5	5	5
1110	5	5	5
1100	4	4	4
1090	3	3	3
1080	3	2	2
1070	2	1	2
1060	2	1	1
1050	1	1	1
1040	1	1	1
1030	1	1	1
1020	1	1	1
1010	1	1	1
1000	1	1	1
990	1	1	1
980	1	1	1
970	1	1	1
960	1	1	1
950	1	1	1
940	1	1	1
930	1	1	1
920	1	1	1
910	1	1	1
900	1	1	1



#### **Appendix B:**

#### **SSAT Means and Standard Deviations**

The means and standard deviations on the following tables are based on first-time Elementary Level test takers who tested from August 1, 2014 through July 31, 2017. 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.



### **Table 1 Boys Tested August 2014-July 2017**

#### MEANS AND STANDARD DEVIATIONS ON THE SECONDARY SCHOOL ADMISSION TEST

Verbal	Elementary	
Grade	03	04
Total Test Takers	694	975
Mean Scaled Score	473	476
Standard Deviation	74	77

Quantitative	Elementary	
Grade	03	04
Total Test Takers	694	975
Mean Scaled Score	482	482
Standard Deviation	75	68

Reading	Elementary	
Grade	03	04
Total Test Takers	694	975
Mean Scaled Score	480	475
Standard Deviation	66	59

Total	Elementary	
Grade	03	04
Total Test Takers	694	975
Mean Scaled Score	1435	1433
Standard Deviation	184	175

<sup>\*</sup>Standard administrations and scheduled Flex administrations.



### **Table 2 Girls Tested August 2014-July 2017**

#### MEANS AND STANDARD DEVIATIONS ON THE SECONDARY SCHOOL ADMISSION TEST

Verbal	Elementary	
Grade	03	04
Total Test Takers	498	873
Mean Scaled Score	464	477
Standard Deviation	72	78

Quantitative	Elementary	
Grade	03	04
Total Test Takers	498	873
Mean Scaled Score	453	458
Standard Deviation	72	68

Reading	Elementary	
Grade	03	04
Total Test Takers	498	873
Mean Scaled Score	469	478
Standard Deviation	67	61

Total	Elementary	
Grade	03	04
Total Test Takers	498	873
Mean Scaled Score	1386	1413
Standard Deviation	181	182

<sup>\*</sup>Standard administrations and scheduled Flex administrations.



### **Table 3 All Students Tested August 2014-July 2017**

#### MEANS AND STANDARD DEVIATIONS ON THE SECONDARY SCHOOL ADMISSION TEST

Verbal	Elementary	
Grade	03	04
Total Test Takers	1192	1848
Mean Scaled Score	469	476
Standard Deviation	73	78

Quantitative	Elementary	
Grade	03	04
Total Test Takers	1192	1848
Mean Scaled Score	470	471
Standard Deviation	75	69

Reading	Elementary	
Grade	03	04
Total Test Takers	1192	1848
Mean Scaled Score	476	477
Standard Deviation	66	60

Total	Elementary	
Grade	03	04
Total Test Takers	1192	1848
Mean Scaled Score	1415	1424
Standard Deviation	185	179

<sup>\*</sup>Standard administrations and scheduled Flex administrations.



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