



CONNECTICUT STATE DEPARTMENT OF EDUCATION

March 2, 2016
Connecticut SAT
School Day

January 27, 2016

Goals of the Redesigned SAT

- More focused on the few essential things that research shows matter most for college readiness
- Assessment and instruction will work together
- Open and clear, so students and educators know what to expect



8 Key Changes to the SAT



Words in Context



Command of
Evidence



Essay Analyzing a
Source



Math that Matters
Most



Problems Grounded
in Real-World
Contexts



Analysis in Science
and in History/Social
Studies



U.S. Founding
Documents and the
Great Global
Conversation



No Penalty for
Guessing



8 Key Changes to the SAT



**Relevant words
in context**

Students will need to:

Interpret meaning based on context

Master relevant vocabulary

Engage in close reading



8 Key Changes to the SAT



Command of evidence

Students will be asked to:

Interpret, synthesize, and use evidence found
in a wide range of sources

Support the answers they choose

Integrate information conveyed through both
reading passages and informational graphics



8 Key Changes to the SAT



Essay analyzing a source

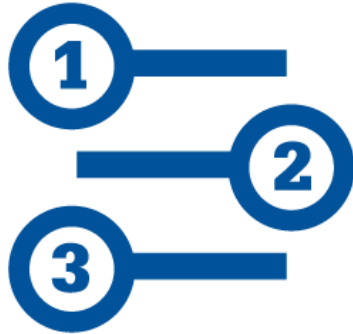
The redesigned essay will:

More closely mirror college writing assignments

Cultivate close reading, careful analysis, and clear writing

Promote the practice of reading a wide variety of arguments and analyzing an author's work

8 Key Changes to the SAT



**Math focused on
three key areas**

Current research shows that three key areas most contribute to readiness for college and career training:

Problem Solving and Data Analysis
(quantitative literacy)

Heart of Algebra (mastery of linear equations)

Passport to Advanced Math (familiarity with more complex equations)



8 Key Changes to the SAT



Problems grounded in real-world contexts

Students will engage with questions that:

Directly relate to the work performed in college and career

Include charts, graphs, and passages likely to be encountered in science, social science, and other majors and careers

Feature multistep applications to solve problems in science, social science, career scenarios, and other real-life contexts



8 Key Changes to the SAT



Analysis in science and social studies

Students will apply their reading, writing, language, and math skills to answer questions in science, history, and social studies contexts.



8 Key Changes to the SAT



**Founding documents
and great global
conversation**

The redesigned SAT will include one of the following:

An excerpt from one of the Founding Documents

A text from the ongoing Great Global Conversation about freedom, justice, and human dignity

No prior knowledge of the text will be required.



8 Key Changes to the SAT



No Penalty for
Guessing

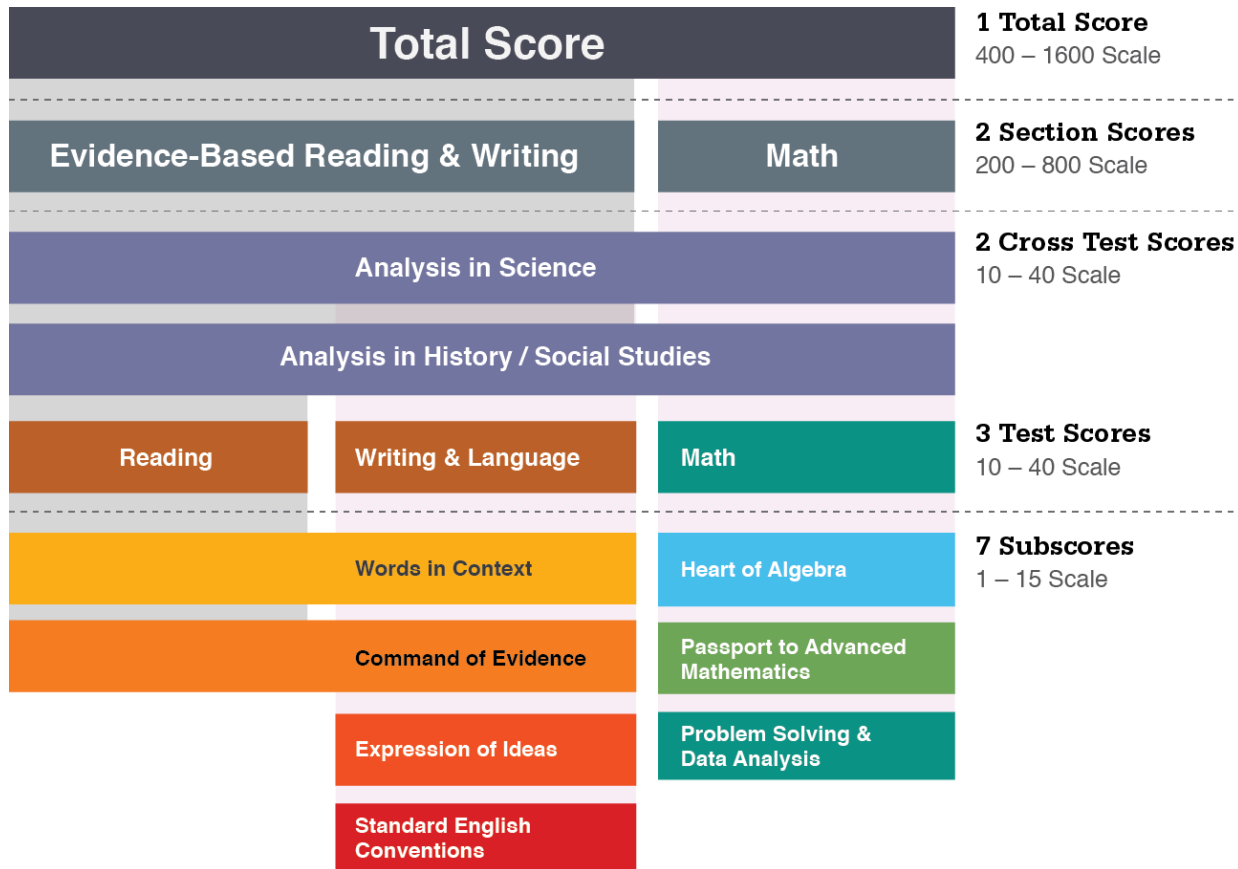
One point for each correct answer

Zero points for unanswered items

Zero points for wrong answers

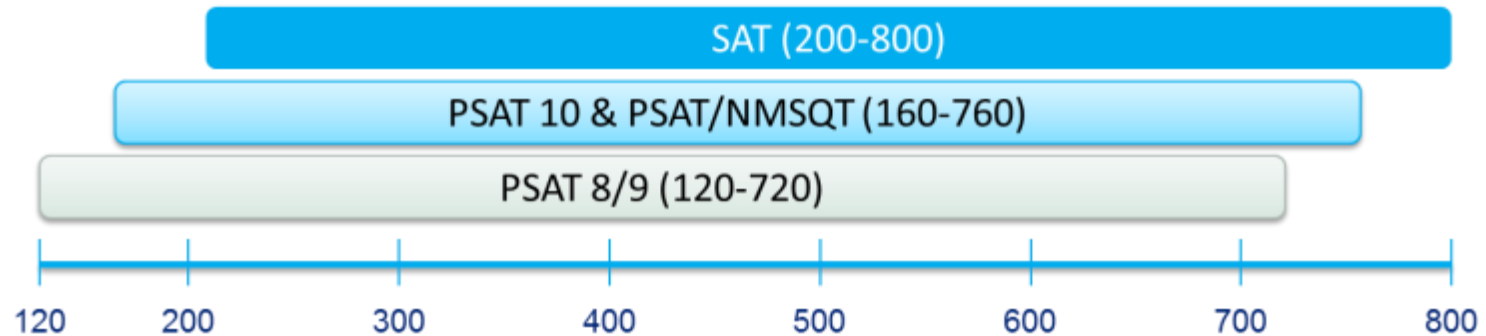


SAT Scores & Subscores



Longitudinal Progress Monitoring

Total score and section scores will be placed on a vertical scale.



Reading Test Specs

SAT READING TEST CONTENT SPECIFICATIONS

	NUMBER	PERCENTAGE OF TEST
Time Allotted	65 minutes	
Passage Word Count	3,250 words total from 4 single passages and 1 pair; 500–750 words per passage or paired set	
Total Questions	52 questions	100%
Multiple Choice (4 options)		100%
Passage Based		100%
Contribution of Items to Subscores and Scores (Percentages do not add up to 100%)		
Words in Context (Across Reading and Writing and Language Tests)	10 questions (2 questions per passage/pair)	19%
Command of Evidence (Across Reading and Writing and Language Tests)	10 questions (2 questions per passage/pair)	19%
Analysis in History/Social Studies (Across Math, Reading, and Writing and Language Tests)	21 questions(all history/social studies questions)	40%
Analysis in Science (Across Math, Reading, and Writing and Language Tests)	21 questions(all science questions)	40%
Passage Contents		
U.S. and World Literature	1 passage; 10 –11 questions	20%
History/Social Studies	2 passages, or 1 passage and 1 pair; 10– 11 questions each	40%
Science	2 passages, or 1 passage and 1 pair; 10 –11 questions each	40%
Graphics		
	1–2 graphics in 1 History/Social Studies and in 1 Science passage	
Text and Graphical Complexity		
Text Complexity	A specified range from grades 9–10 to postsecondary entry across 4 passages and 1 pair	
Graphical Data Representations (tables, graphs, charts, etc.)	Somewhat challenging to challenging (moderate to moderately high data density, few to several variables, moderately challenging to moderately complex interactions)	



Former SAT question-Critical Reading - Determining Meaning of Words

In young children, some brain cells have a _____ that enables them to take over the functions of damaged or missing brain cells.

- (A) fragility
- (B) reminiscence
- (C) perniciousness
- (D) whimsicality
- (E) plasticity



Former SAT Question: Critical Reading – Sentence Completion

Because their behavior was ----- , Frank and Susan served as ----- models for the children under their excellent care.

- (A) incorruptible . . pernicious
- (B) lamentable . . flawed
- (C) commendable . . exemplary
- (D) erratic . . unimpeachable
- (E) reputable . . imperfect



Redesigned SAT Sample Item: Relevant Words in Context (Reading Test)

[. . .] The coming decades will likely see more **intense** clustering of jobs, innovation, and productivity in a smaller number of bigger cities and city-regions. Some regions could end up bloated beyond the capacity of their infrastructure, while others struggle, their promise stymied by inadequate human or other resources.

Adapted from Richard Florida, *The Great Reset*.
©2010 by Richard Florida.

As used in line 55, “intense” most nearly means

- A) emotional.
- B) concentrated.
- C) brilliant.
- D) determined.



SAT Writing and Language Test Content Specifications

SAT WRITING AND LANGUAGE TEST CONTENT SPECIFICATIONS

	NUMBER	PERCENTAGE OF TEST
Time Allotted	35 minutes	
Passage Word Count	1700 words total from 4 passages; 400–450 words per passage	
Total Questions	44 questions	100%
Multiple Choice (4 options)		100%
Passage Based		100%
Contribution of Items to Subscores and Scores		
Expression of Ideas	24 questions	55%
Standard English Conventions	20 questions	45%
Words in Context (Across Reading and Writing and Language Tests)	8 questions (2 questions per passage)	18%
Command of Evidence (Across Reading and Writing and Language Tests)	8 questions (2 questions per passage)	18%
Analysis in History/Social Studies (Across Math, Reading, and Writing and Language Tests)	6 questions (all Expression of Ideas questions in history/social studies)	14%
Analysis in Science (Across Math, Reading, and Writing and Language Tests)	6 questions (all Expression of Ideas questions in science)	14%
Passage Contents		
Careers	1 passage; 11 questions	25%
History/Social Studies	1 passage; 11 questions	25%
Humanities	1 passage; 11 questions	25%
Science	1 passage; 11 questions	25%



Former SAT: Writing – Improving Sentences

As one travels inland, the details of the landscape become harsh, brutal, and it can frighten people.

- (A) become harsh, brutal, and it can frighten people
- (B) become harsh, brutal, and frightening
- (C) when they become harsh, brutal, and frightening
- (D) becoming harsh and brutal, and frightening to people
- (E) become harsh, brutal, and it can frighten one



SAT Writing & Language Test: Features

- Passage based
- Cross-disciplinary contexts:
 - Humanities
 - History/social studies
 - Science
 - Careers
- Informational graphics
- Multiple text types: argument, informative, nonfiction narrative
- Focus on:
 - Expression of ideas
 - Standard English conventions
 - Words in context
 - Command of evidence



SAT Math

- The overall aim of the SAT Math Test is to assess fluency with, understanding of, and ability to apply the mathematical concepts that are most strongly prerequisite for and useful across a wide range of college majors and careers.
- The Math Test has two portions:
 - Calculator Portion (38 questions) 55 minutes
 - No-Calculator Portion (20 questions) 25 minutes
- Total Questions on the Math Test: 58 questions
 - Multiple Choice (45 questions)
 - Student-Produced Response (13 questions)



SAT Math- Calculator/No Calculator

- The Calculator portion:
 - gives insight into students' capacity to use appropriate tools strategically.
 - includes more complex modeling and reasoning questions to allow students to make computations more efficiently.
 - includes questions in which the calculator could be a deterrent to expedience.
 - students who make use of structure or their ability to reason will reach the solution more rapidly than students who get bogged down using a calculator.
- The No-Calculator portion:
 - allows the redesigned SAT to assess fluencies valued by postsecondary instructors and includes conceptual questions for which a calculator will not be helpful.



Grid-in Questions

Student-produced response questions, or grid-ins:

- The answer to each student-produced response question is a number (fraction, decimal, or positive integer) that will be entered on the answer sheet into a grid such as the one shown below.
- Students may also enter a fraction line or a decimal point.

Answer: $\frac{7}{12}$

Write answer in boxes. →

7	/	1	2
0	0	0	0
1	1		1
2	2	2	
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
	7	7	7
8	8	8	8
9	9	9	9

← Fraction line

Answer: 2.5

Write answer in boxes. →

	2	.	5
0	0	0	0
1	1	1	1
2		2	2
3	3	3	3
4	4	4	4
5	5	5	
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

← Decimal point



SAT Math Test Specs

SAT Math Test Question Types	
Total Questions	58 questions
Multiple Choice (four answer choices)	45 questions
Student-Produced Responses (SPR or grid-ins)	13 questions
Contribution of Questions to Subscores	
Heart of Algebra	19 questions
Problem Solving and Data Analysis	17 questions
Passport to Advanced Math	16 questions
Additional Topics in Math*	6 questions
Contribution of Questions to Cross-Test Scores	
Analysis in Science	8 questions
Analysis in History/Social Studies	8 questions



SAT Math Test Domains

Four Math Domains:

1. Heart of Algebra
 - a. Linear equations
 - b. Fluency
2. Problem Solving and Data Analysis
 - a. Ratios, rates, proportions
 - b. Interpreting and synthesizing data
3. Passport to Advanced Math
 - a. Quadratic, exponential functions
 - b. Procedural skill and fluency
4. Additional Topics in Math
 - a. Essential geometric and trigonometric concepts



How Does The Math Test Relate to Instruction in Science, Social Studies, and Career-Related Courses?

- Math questions contribute to **Cross-Test Scores**, which will include a score for Analysis in Science and Analysis in History/Social Studies. The Math Test will have eight questions that contribute to each of these Cross-Test Scores.
 - Question content, tables, graphs, and data on the Math Test will relate to topics in science, social studies, and career.
- On the Reading Test and Writing and Language Test, students will be asked to analyze data, graphs, and tables (no mathematical computation required).



Heart of Algebra (Calculator)

When a scientist dives in salt water to a depth of 9 feet below the surface, the pressure due to the atmosphere and surrounding water is 18.7 pounds per square inch. As the scientist descends, the pressure increases linearly. At a depth of 14 feet, the pressure is 20.9 pounds per square inch. If the pressure increases at a constant rate as the scientist's depth below the surface increases, which of the following linear models best describes the pressure p in pounds per square inch at a depth of d feet below the surface?

A) $p = 0.44d + 0.77$

B) $p = 0.44d + 14.74$

C) $p = 2.2d - 1.1$

D) $p = 2.2d - 9.9$



Heart of Algebra (Calculator)

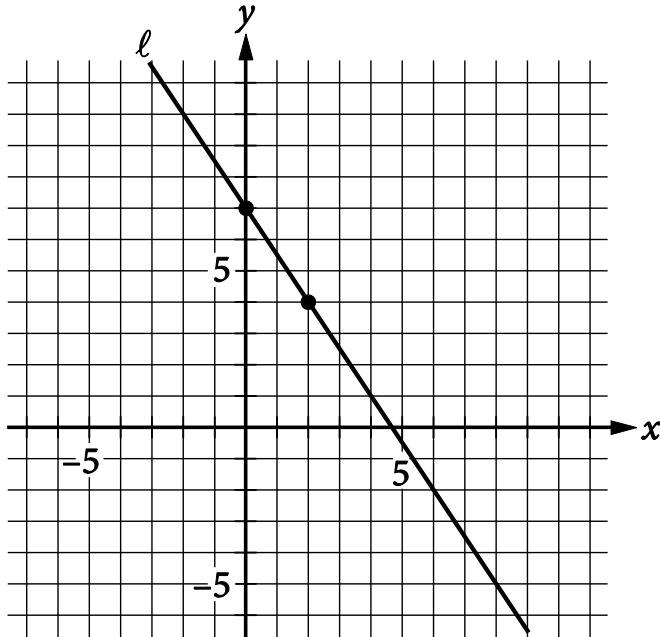
Choice B is correct. To determine the linear model, one can first determine the rate at which the pressure due to the atmosphere and surrounding water is increasing as the depth of the diver increases. Calculating this gives

$$\frac{20.9-18.7}{14-9} = \frac{2.2}{5} \text{ or } 0.44$$

Then one needs to determine the pressure due to the atmosphere or, in other words, the pressure when the diver is at a depth of 0. Solving the equation $18.7 = 0.44 (9) + b$ gives $b = 14.74$. Therefore, the model that can be used to relate the pressure and the depth is $p = 0.44 d + 14.74$.



Heart of Algebra (No Calculator)



1. If line l is translated up 5 units and right 7 units, then what is the slope of the new line?

- A) $-\frac{2}{5}$
- B) $-\frac{3}{2}$
- C) $-\frac{8}{9}$
- D) $-\frac{11}{14}$



Problem Solving and Data Analysis: Sample Question (Calculator)

A typical image taken of the surface of Mars by a camera is 11.2 gigabits in size. A tracking station on Earth can receive data from the spacecraft at a data rate of 3 megabits per second for a maximum of 11 hours each day. If 1 gigabit equals 1,024 megabits, what is the maximum number of typical images that the tracking station could receive from the camera each day?

- A) 3
- B) 10
- C) 56
- D) 144



Problem Solving and Data Analysis: Sample Question (Calculator)

Choice B is correct. The tracking station can receive 118,800 megabits each day

$$\left(\frac{3 \text{ megabits}}{1 \text{ second}} \times \frac{60 \text{ seconds}}{1 \text{ minute}} \times \frac{60 \text{ minutes}}{1 \text{ hour}} \times 11 \text{ hours} \right), \text{ which is about 116}$$

gigabits each day

If each image is 11.2 gigabits, then the number of images that can be received each day is Since the question asks for the maximum number of typical images, rounding the answer down to 10 is appropriate because the tracking station will not receive a complete 11th image in one day.



Passport to Advanced Math: Sample Question

The function f is defined by $f(x) = 2x^3 + 3x^2 + cx + 8$, where c is a constant. In the xy -plane, the graph of f intersects the x -axis at the three points $(-4, 0)$, $(\frac{1}{2}, 0)$, and $(p, 0)$. What is the value of c ?

- A) -18
- B) -2
- C) 2
- D) 10



Passport to Advanced Math: Answer Explanation

Choice A is correct. The given zeros can be used to set up an equation to solve for c . Substituting -4 for x and 0 for y yields $-4c = 72$, or $c = -18$.

Alternatively, since -4 , $\frac{1}{2}$, and p are zeros of the polynomial function

$f(x) = 2x^3 + 3x^2 + cx + 8$, it follows that $f(x) = (2x - 1)(x + 4)(x - p)$.

Were this polynomial multiplied out, the constant term would be

$(-1)(4)(-p) = 4p$. (We can see this without performing the full expansion.)

Since it is given that this value is 8 , it goes that $4p = 8$ or rather, $p = 2$. Substituting 2 for p in the polynomial function yields

$f(x) = (2x - 1)(x + 4)(x - 2)$,

and after multiplying the factors one finds that the coefficient of the x term, or the value of c , is -18 .



CT SAT School Day - Key Dates

Activities	Date
Registration materials arrive in schools	1/19/16
List of unregistered students available in PSIS	Available Now
Accommodations requests submitted in SSD Online for College Board Accommodations	Now – 2/8/16
Accommodations requests for ELs requesting Translated Test Directions for college reportable scores	Now – 2/15/16
Accommodations requests submitted in SSD Online for Connecticut Specific Accommodations	1/21-2/15/16
Complete Paper Registration	1/19/16 -2/1/16
Return paper registration forms to College Board via custom courier	2/1/16
Test materials arrive at test centers	2/26/16
Connecticut SAT School Day Test Administration	3/2/16
Makeup Test materials arrive at test centers	4/22/16
Connecticut SAT School Day Makeup Administration	4/27/16



Student Registration

- CSDE and College Board pre-registered as many students as possible by using the CSDE eligible students list that was generated from a snapshot of PSIS and matching it to students who have previously taken a College Board assessment.
- Approximately 72% of Connecticut Grade 11 students were matched and pre-registered.
- School districts are required to use a paper registration form for each Grade 11 student who has not been pre-registered.



Student Registration

- Test Day Registration: Any student who is not paper-registered or pre-registered will be required to complete a registration form on test day.
- All grade 11 students must be tested.



Student Participation Policy

Students who are enrolled in state Approved Private Special Education Programs (APSEP)

Tested by the APSEP.

Students who move to a private school or to an out-of-state school during testing.

Will not be tested.

Students Hospitalized or Homebound due to illness

Will not be tested.

Students on Homebound instruction due to Suspension or Expulsion

Must be tested at the school district's central administration offices by a certified school staff member who is fully trained in the proper test administration and security procedures.

Students who may qualify for a Medical Exemption

Contact CSDE for information.

Home Schooled Students

Will not be tested.



Student Participation Policy

Students who are newly enrolled in a Connecticut public school after the district testing window has commenced.

Will take the SAT on the April 27, 2016 makeup date.

Student was enrolled as a Grade 9,10, or 11 grade student at the beginning of the year and is a Grade 12 student during the testing window.

The district must determine when the student is closest to being a Grade 11 student and test in that year. A public high school student may not skip mandatory SAT in Grade 11.

A Grade 12 student transfers into a Connecticut public high school from out of state or from a private school.

Will not be tested.

Students who are in PSIS and who are enrolled in non-public schools.

Will not be tested.



Options for Students Registered for a Weekend SAT

Students or their parents may contact College Board at 866-756-7346 to:

- Change their current weekend registration to another weekend administration (March, May, or June) without a change fee.
- Apply their payment toward an SAT Subject Test instead of the SAT without a change fee.
- Or, receive a refund for a March, May, or June 2016 administration.



Roles and Responsibilities at Participating Schools

- **Principal** is the main contact at the school and is responsible for:
 - Receiving and distributing general information about the Official SAT Practice through Khan Academy.
 - Receiving the school's allotment of School Day Fee Waivers for distribution to eligible students.
 - Enlisting the aid of other staff, but s/he will be the College Board's main contact.



Roles and Responsibilities at Participating Schools

- **SSD Coordinator** is responsible for:
 - Being the school's liaison with the College Board's Services for Students with Disabilities office.
 - Submitting accommodation requests for all students who request them at his/her school.
 - Administering the test to students who have a non-standard administration of the test and appear on the Non-standard Administration Roster (NAR).



Roles and Responsibilities at Participating Schools

- **Test Center Supervisor (TCS)** is responsible for:
 - All aspects of the School Day administration at a school, including:
 - Pre-admin activities like test center set-up, planning rooms and staff for test day, and receiving and securing test materials.
 - Everything on test day, including distribution of materials, monitoring of all test day activities and staff, packaging and returning test materials, and completing Supervisor Irregularity Reports.
 - TCS may choose to enlist the aid of others at the school to help him/her with test day planning and set-up.
 - The TCS will remain the main contact and receive all communications from the College Board and ETS.
 - Identifying staff to serve as **Associate Supervisors, Proctors** and **Hall Monitors** for test day staff support



Accommodations

	College Reportable Accommodations	Connecticut Specific Accommodations
Students with Disabilities	Used for accountability and college admission	Used for accountability purposes only
	<ul style="list-style-type: none"> • Braille Booklets • Text-to-Speech for all test content (CB MP3 audio) • Large Print Booklet • Color Overlay • Noise Buffering • Magnification Device • Computer Response • Scribe • Speech-to-Text (CB Assistive Technology) • Specialized Calculator • Abacus • Multiplication table • Time Extension • Separate Setting • American Sign Language (ASL)- test directions only • Signed Exact English -test directions and test content 	<ul style="list-style-type: none"> • Sign Language – test content • Sign Language – student responses
English Learners	Used for accountability and college admission	Used for accountability purposes only
	<ul style="list-style-type: none"> • Written Directions in Spanish, Arabic, Portuguese, Polish, Mandarin and Haitian-Creole • Native Language Reader – test directions only 	<ul style="list-style-type: none"> • Time Extension • Bilingual Dictionary Word-to-Word Translation

Accommodations

All accommodations are requested through College Board's [SSD Online System](#).

College Reportable Accommodations

- Students with an individual education program (IEP)
- Students with Section 504 Plans
- English Learners requesting written directions or oral test directions
- Deadline: **February 8, 2016.**



Accommodations

Connecticut Specific Accommodations

- Students with an individual education program (IEP)
- Students with Section 504 Plans
- English learners requesting time extension and/or a bilingual dictionary
- Deadline: **February 15, 2016.**



Testing Time

- Testing time with breaks included is 3 hours, 30 minutes, please plan for an additional 30 minutes of pre-administration time.

SAT Sections	Time (in minutes)
Reading	65
Break	10
Writing and Language	35
Math (no calculator)	25
Break	5
Math (with calculator)	55
Book collection	15
Total (hours, minutes)	3h, 30m

- School schedules will require adjustments
 - Lunch periods
 - Testing cannot be interrupted for lunch, so lunches must take place after testing is complete
 - Students may eat snacks during breaks
 - Bell schedules
 - Bells must be silenced during test administration



Test Day Schedule

8am *	Close test room doors
8-8:30 am	Distribute materials and read directions
8:30 am	Begin testing
11:45 am	Finish testing
* Schools may vary this start time by 30 minutes without approval required.	

- Schools can vary from this schedule by up to 30 minutes.
- If a school needs to vary from this schedule by more than 30 minutes they need to contact SAT School Day Customer Support for approval



Planning for test rooms

- Size of cohort testing and size of rooms used for testing determine number of rooms needed.
- Options for rooms include:
 - Larger spaces, such as auditoriums and gymnasiums
 - Smaller spaces, such as classrooms
- Seating diagrams for different room types are available in Test Center Supervisor's Manual
 - Spacing requirements and furniture requirements
- Location of testing rooms within the building
 - Separated from other classes/tests on different schedules or taking different assessments
 - Minimize noise and other disruptions when classes or other assessments break
 - Area where there will be minimal noise/distractions from outside the building
 - Access to restrooms



Staff Requirements

- The size of cohort testing, number of testing rooms and number of students in each room determine number of staff needed.
 - Formulas available in Test Center Supervisor Manual
- Test Day staff requirements
 - Not employed by an outside test-prep company.
 - Have not taken the SAT within 180 days of the administration date.
 - Does not have a household member taking the test at any site on the same date.



Benefits of the SAT

- Khan Academy is designed to engage students in 30 minutes of productive practice on a daily basis.
 - All questions in the Khan platform meet SAT test specifications.
 - Four full-length SAT practice tests are available.
- Practice is focused on priority areas.
 - Khan question format and design mirrors the design/format of the online SAT.
 - Each question will provide answer explanations, step-by-step solution, and hints.



Khan Academy Features

Feature	Description
Practice questions	Thousands of practice questions for math, reading, and writing co-developed with the College Board
Practice tests	Four full-length practice redesigned SATs written by the College Board with answer explanations
Diagnostic quizzes	Brief diagnostic quizzes for math, reading, and writing to gauge starting skill levels
Recommendations	Customized skills and tutorial recommendations based on your skill level and the proportion that topics are tested
Skills analysis	Summary of skills for math, reading, and writing and current performance and level on each skill
Tutorials	Customizable exercises and videos that allow you to review concepts and focus your practice



Score Reporting and Scholarships

- All students who take the SAT are eligible for 4 free “score sends”.
- To send scores, students must log into their College Board account and add in the colleges or scholarship organizations to which they want to send the scores.
- Students have until **March 11, 2016**, at 11:59PM EST to add score sends through their College Board account.
- After **March 11, 2016**, students are still able to have their scores sent to colleges and scholarship organizations, but there is a fee.



Score Choice

- College Board will send scores to the institutions identified based on the policies of that institution.
- For student who have only taken the SAT once, that will be the only score that is sent to colleges/universities.
- For students, who have taken the SAT multiple times, they can use Score Choice and select which scores, by test date for the SAT, to send to colleges. See:
<<https://sat.collegeboard.org/register/sat-score-choice>>
- If students do not use Score Choice, all scores will be sent. However, it is up to a student/family to understand the Higher Ed institutions policies. Some institutions will require all scores to be sent if the student has taken more than one SAT.



Score Cancellation

- Students who take the test and will receive college reportable scores have the option to cancel their scores, however the scores will still be provided to CSDE for accountability purposes.
- SAT scores will only be sent to Higher Education institutions if a student requests College Board to send them.
- If a student elects to send scores, but changes their mind after taking the test, they may cancel their scores within 24 hours by completing the Cancel Scores form (<https://sat.collegeboard.org/scores/cancel-sat-scores>) for more info).
- If cancelled, the university will not receive any score, however the student and state will still receive their scores.



Standard Setting

- Connecticut standards will be set for the CT SAT School Day
- Process will occur after the test is administered and test data is available



College Board Resources

www.collegereadiness.collegeboard.org

- 6 Training Modules
- Sample full length tests
- Test Specifications



Contact Information

Michelle Rosado, CSDE
michelle.rosado@ct.gov

www.ct.gov/sde/sat

CSDE SAT Web page

