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SAT*

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CHRISTOPHER BLACK, MA • MARK ANESTIS, MA

Welcome to

McGraw-Hill Education

SAT

Congratulations! You've chosen the SAT guide from America's leading educational publisher. You probably know us from many of the textbooks you used in school. Now we're ready to help you take the next step—and get into the college or university of your choice.

This book gives you everything you need to succeed on the test. You'll get in-depth instruction and review of every topic tested, tips and strategies for every question type, and practice exams to boost your test-taking confidence. To get started, go to the following pages where you'll find:

- ◆ **How to Use This Book:** Step-by-step instructions to help you get the most out of your test-prep program.
- ◆ **Your SAT Action Plan:** Learn how to make the best use of your preparation time.
- ◆ **SAT Format Table:** This handy chart shows the test structure at a glance: question types, time limits, and number of questions per section.
- ◆ **The 40 Top Strategies for Test Day:** Use this list to check your knowledge, or as a last-minute refresher before the exam.
- ◆ **The 5 Top SAT Calculator Tips:** Learn some smart ways that your calculator can help you.
- ◆ **Getting the Most from the Free Online Practice Tests:** Log on to the companion website for more test-taking practice.

ABOUT MCGRAW-HILL EDUCATION

This book has been created by McGraw-Hill Education. McGraw-Hill Education is a leading global provider of instructional, assessment, and reference materials in both print and digital form. McGraw-Hill Education has offices in 33 countries and publishes in more than 65 languages. With a broad range of products and services—from traditional textbooks to the latest in online and multimedia learning—we engage, stimulate, and empower students and professionals of all ages, helping them meet the increasing challenges of the 21st century knowledge economy.

How to Use This Book

This book is designed for students who want an effective program for the most dramatic SAT score improvements. It is based on the College Hill Method™, the elite training system used by the tutors of College Hill Coaching since 1990. It focuses on what works best in SAT prep: mindful training in the reasoning skills at the core of the SAT, and not just test-taking tricks or mindless drills.

This book provides all the material you need to score well on the SAT. It will teach you the knowledge that is required for this exam, including information about each type of question on the test. It also provides ample practice for you to refine the skills you are learning and then test yourself with full-length practice tests. For best results as you work your way through the book and the accompanying online tests, use this four-step program that follows:

1 Learn About the SAT

Don't skip Chapter 1. In it you'll meet the SAT and learn exactly what academic skills it tests. You'll also find valuable test-taking strategies and information about how the test is scored.

2 Take a Realistic Practice SAT

Take the SAT diagnostic test in Chapter 2 of this book. Take the test strictly timed, in one sitting, and proctored if possible. Then use the answer key to evaluate your results so you can learn your strengths and weaknesses.

3 Study What You Need to Learn with the Lessons and Exercises

If you miss a question on your practice SAT, read its answer explanation at the end of the test. If it refers to a lesson in Chapters 4–10, make that lesson part of your weekly review.

- ◆ First read each **Lesson** carefully, underlining important ideas or writing notes in the margins.
- ◆ Check your understanding of the concepts and skills in these lessons by working through the questions and answers in each Exercise Set.
- ◆ When you're done, read all of the explanations in the **Answer Key**, even for questions that you got right. Why? Because very often, there are many ways to get a question right, and some may be much more efficient than the one you used!

4 Repeat the Cycle Until You've Surpassed Your SAT Score Goal

Take the practice tests in this book and on the companion website, trying each time to simulate actual testing conditions. Then correct your test with the detailed answer key, and review the relevant lessons in Chapters 4–10 that will help you to improve your skills for the next test.

Your SAT Action Plan

To make the best use of your SAT preparation time, you'll need a personalized action plan that's based on your needs and the time you have available. This book has been designed for flexibility; you can work through it from cover to cover or you can move around from one chapter to another in the order you want based on your own priorities and needs. However, before you jump in, maximize the effectiveness of your preparation time by spending a few minutes to develop a realistic action plan. Use the tools provided in these pages to help you focus on the areas where you are weakest, plan your study program, and gain the discipline you need to pace yourself and achieve your goals.

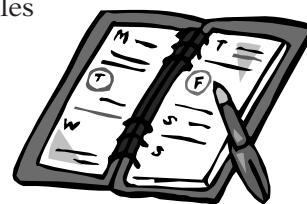


The College Hill SAT Study Plan

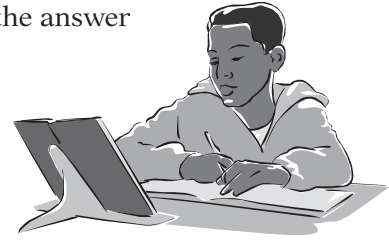
Each time you take a practice SAT in this book or online, take a few minutes to review your performance and make a plan for improving your scores on the next test.

Questions About Your Performance

- 1 What were your test conditions?** Did you take your practice SAT as you would take a real SAT? Were you sitting at a desk and at a neutral site? Did you time yourself strictly? Did you take the test all at one sitting? If your conditions were not realistic, make sure that they are more realistic next time. Also, note any conditions that may have affected your performance, like “broken clock,” “noisy radiator,” “freezing room,” or “phone interruption.” Learning to deal with distractions and with the length and time limits of the SAT is very important to peak performance.
- 2 What was your pre-test routine?** What you do just before the test can be very important to your performance. Having a raging argument with someone, for instance, probably won't help. To perform your best, get at least 8 hours of sleep the night before, get 30 minutes of exercise prior to the SAT, and have a good breakfast. Write down anything significant that you did just prior to the test, like “ran 4 miles,” “had oatmeal and orange juice,” “was yelled at by Dad,” or “did 15 minutes of yoga.”
- 3 Did you attack the questions you need to attack?** The score conversion tables at the end of each practice test (for instance, those on pages 68–69), show you how many questions you need to answer correctly on each section to make your score goals. After each test, ask yourself, “How many more points do I need, and how can I get them?” Try to find patterns among the questions you missed, so you know which sections in this book to review before the next test.
- 4 Did you rush to complete any section?** Rushing is never a good strategy on the SAT. You must learn to work briskly, but attentively. After you complete a practice SAT, ask yourself: did I make any careless errors because I was rushing?



- 5 Study Plan.** This is the real key to improving your SAT score. Go to the answer explanations and carefully read the explanations for the questions you missed. Then notice the types of questions you missed, and make a plan to review the corresponding lessons in this book. For instance, you might write down in your notebook that you need to “Learn about dangling participles,” or “Review how to simplify polynomials.”



Your Weekly SAT Study Schedule

A complete SAT preparation program usually requires between 8 and 12 weeks, depending on your skill and comfort level with the test. Be diligent, but don't overwhelm yourself. Your schoolwork should take priority over SAT prep—colleges care a lot about those grades, and for good reason! But if you make a manageable plan to work for at least 30 minutes every weeknight on your SAT review, you will see great results in just a matter of weeks.

Remember that it is more productive to do some work every day rather than a lot of work just one day a week.

Your daily SAT work should include learning 5–10 new vocabulary words and roots from Chapter 3 and, if you are taking the Essay component, reading and analyzing at least one Op-Ed from the *New York Times*. (Chapter 6 will explain how to do this.) Analytical reading is more important than ever on the SAT, so practice it every day! Also, set aside 20–30 minutes each day to work through the lessons and worksheets in this book.

How to Stick to Your Study Plan

- ◆ Twenty minutes of cardiovascular exercise is a great warm-up before you start your homework. Exercise doesn't help just your muscles; it also helps your brain. When your brain is well oxygenated, it works more efficiently, so you do your work better and faster. If you don't already have an exercise routine, try to build up to a good 20- to 45-minute aerobic workout—running, rowing, swimming, biking—every day. Your routine will also help you enormously on test day; exercising on the morning of the SAT will help you to relax, focus, and perform!
- ◆ If you get nervous when you think about the SAT, try learning “mindfulness” exercises, like deep breathing, meditation, or yoga. Such exercises will also help enormously on test day.
- ◆ Prepare your space. Many students waste a lot of study time because they don't prepare their work space properly. Find a quiet, clean place where you can stay focused for a good stretch of time, away from the TV and troublesome siblings. Sit in an upright chair at a table or desk with good lighting. Also, make sure that all the tools you will need are within easy reach: a dictionary, note cards, calculator, and pencils with erasers. Turn off your cell phone and close the door!
- ◆ Sit up straight when you work. Don't work on your bed, on the floor, or in a reclining chair. When your body tilts, your brain goes into “sleep mode” and has to work harder to focus.
- ◆ Whenever you feel fatigued from studying, take a 10-minute break. Get a quick snack or listen to a couple of your favorite songs. But stay focused. Don't get sucked into returning twenty text messages.

40 Top Strategies for Test Day

Here are 40 key reminders for success on test day. Take a quick glance through this list on the morning of the test to make sure you can put all of your preparation to use and get your best score.

General Strategies

- 1 Take control.** Not every student will ace the SAT, but any student can *take charge of it*. Go into the test with confidence and the game plan that you've put together.
- 2 Lay everything out the night before.** You'll sleep easier the night before the SAT knowing that you're ready to go. Lay out three #2 pencils *with good erasers*, your calculator *with fresh batteries*, your admission ticket, your photo ID, and a snack.
- 3 Have a good breakfast.** Your brain can't work well without fuel. Have a good breakfast including fruit, complex carbohydrates, and protein. You'll be glad you ate a good breakfast when you're entering hour 3 of the SAT!
- 4 Know where you're going.** If you're taking the SAT at an unfamiliar school, acquaint yourself with it before test day. Take a trip there in a few days before the test so you don't worry about getting lost on test day.
- 5 Dress properly.** Dress in light layers so you'll be comfortable whether the testing room is sweltering or frigid. An uncomfortable body makes for a distracted brain.
- 6 Get a good two nights' sleep.** A rested brain is a smarter brain. The nights before the SAT are for sleeping, not for all-nighters. Get a good eight hours each of the two nights before your SAT.
- 7 Get some exercise.** The SAT is given in the morning, when most of us are a bit foggy, so get a leg up on the competition by waking your brain with exercise. Twenty minutes of cardio will keep you alert.
- 8 Bring a snack.** Your brain burns calories when it's thinking hard. Bring a granola bar, banana, or energy bar to the SAT to refuel during the break.
- 9 Know what to attack.** As you begin each section of your SAT, know how many points you need to make your score goal on that section, and focus on hitting that goal. Even if you have to guess on all the rest of the questions for that section, you won't feel discouraged if you've hit your goal.
- 10 Take a "two-pass" approach.** If you've built a smart game plan and practiced with it, you should have enough time to tackle all of your "must answer" questions, then take one more pass through them, checking for common mistakes. Once all of your "must answer" questions have been double-checked, you can approach the hardest questions carefully.
- 11 Shut out distractions.** If you have a game plan and have practiced it, you should feel confident enough to shut out everyone else during the test. Don't speed up just because the girl next to you is racing through her test. Ignore her: she's probably rushing because she's nervous. Stick to your game plan. Also, if you are easily distracted by noises around you like tapping pencils, sniffing testers, or clanking radiators, bring a pair of wax earplugs.
- 12 Watch the clock—but not too much.** If you have taken enough practice SATs, you should go into the test with confidence in your ability to pace yourself through each section. But, for insurance, you might want to bring a silent stopwatch (not a cell phone timer) and check it occasionally to make sure you're on pace.
- 13 Work briskly, but not carelessly.** Don't get bogged down on tough questions: if you get stuck on a question, just make a guess, circle the question in your test booklet (in case you have time to come back to it later), and move on. Remember, rushing is never a good strategy. Optimize your score by working briskly enough to attack all of the questions you need to, but not so quickly that you make careless errors.

- 14 Don't worry about answer patterns.** Some SAT takers refuse to make certain patterns on their answer sheet. For instance, they won't mark (C)—even if it's clearly the best answer—if they already have three (C)s in a row. Bad idea: pick what you think is the best answer, regardless of any answer patterns.

Reading Test

- 15 Don't psych yourself out on the reading sections.** On the Reading Test, don't psych yourself out with negative self-talk. Instead, take a positive attitude, remind yourself of the key strategies from Chapter 5, and tell yourself that you're going to learn something interesting.
- 16 Focus on the 3 key questions.** The key to good reading comprehension is answering three key questions discussed in Chapter 5: What is the purpose? What is the main idea? And what is the overall structure of the passage?
- 17 Get your own answer first.** On the Reading Test, don't jump to the choices too quickly. Instead, read each question carefully and think of your own answer first, then find the choice that best matches it. This will help you avoid the "traps."
- 18 Deal with your "space outs."** Many students "space out" on the Reading Test because they get overwhelmed or disoriented when reading about topics like paleontology or primitivism. If it happens to you, don't panic and don't rush. Just continue from where you left off.
- 19 Be selective on the reading questions.** Unlike the other SAT sections, the reading questions don't get progressively harder. If you get to a tough reading question, make a guess and move on; the next one might be easier.
- 20 Don't fall for the traps.** Always read critical reading questions very carefully. Many choices are "traps:" they make true statements about the passage, but they are not "correct" because they do not answer the question asked. You won't fall for them if you get your own answer first.
- 21 Know how to attack the "paired passages."** On the "paired" passages (Passage 1 vs. Passage 2), it is generally best to read Passage 1 and then go right to the questions that pertain to Passage 1 before moving on to Passage 2. If you try to read the passages back-to-back, it may be harder to recall and distinguish the key information from the two passages. Don't let them run together.

Writing and Language Test

- 22 Know the key grammar rules.** Go into the SAT writing with a solid understanding of the key grammar rules. If you can't explain parallelism, dangling participles, or pronoun case errors, make sure you study Chapter 4 carefully!
- 23 Trust your ear (at least at first).** If you've read a lot of good prose in your life, you have probably developed a good ear for the rules of grammar and usage grammar. On the easy and medium writing questions, then, your ear will be your best guide: bad phrases will "sound" wrong. On harder questions, however, your skill in analyzing sentences will come into play.
- 24 Know how to analyze the tricky sentences.** Chapter 4 provides lots of exercises to help you to recognize the most relevant grammar mistakes and to analyze sentences like a pro. You'll need to know how to do things like "trim" sentences to catch the trickiest errors.
- 25 Don't fear perfection.** On SAT Writing and Language Test questions, the NO CHANGE choice should be correct roughly 1/4 of the time over the long term. Bottom line: don't shy away from NO CHANGE but choose it only after careful analysis.
- 26 Make sure it's a real mistake.** On SAT Writing and Language Test questions, a word or phrase isn't necessarily wrong just because you might say it differently. For instance, if the word *since* is underlined, don't assume it's incorrect just because you prefer to say *because*—the words are interchangeable. Make sure that you know how to fix the mistake—and that it's a *real* grammatical or semantic mistake—before choosing it.

- 27 Keep the overall purpose and tone in mind.** Many Writing and Language Test questions require you to understand the overall purpose and tone of particular paragraphs or the passage as a whole. Don't lose the overall picture by focusing too narrowly on the details.
- 28 Read it again to check.** Before choosing an answer on a Writing and Language Test question, always re-read the entire sentence, including the correction, to make sure the sentence flows smoothly and logically. If the whole *sentence* doesn't sound better, it's wrong.

Math Test

- 29 Mark up the test.** The best SAT takers do lots of scratch work, particularly on the math section. Don't be afraid to write on your test booklet. The SAT doesn't award points for neatness! Write down what you know and show your steps. Mark up diagrams, write equations, and show your work so that you can check it when you come back later.
- 30 Look for patterns and use them.** One important skill the SAT Math Test is "pattern finding." Always pay special attention to simple patterns or repetitions in a problem, because exploiting them is usually the key to the solution.
- 31 Keep it simple.** If you're doing lots of calculations to solve an SAT math problem, you might be overlooking a key fact that simplifies the problem. Always look for the easy way.
- 32 Know the basic formulas.** Many formulas you will need for the SAT Math Test are given to you in the "Reference Information" at the beginning of each Math Test section. Even so, get fluent in them so you can easily recognize when to use them. Also, use flash cards to review the key formulas from algebra, geometry, trigonometry, and statistics from Chapters 7–10.
- 33 Check your work.** There are many ways to make careless mistakes on the SAT math. Give yourself time to go back and check over your arithmetic and algebra, and make sure everything's okay.
- 34 Consider different approaches.** If you're stuck on a math question, try working backwards from the choices, or plugging in numbers for the unknowns.
- 35 Watch out for key words.** Pay special attention to words like *integer*, *even*, *odd*, and *consecutive* when they show up, because students commonly overlook them. And make sure you don't confuse *area* with *perimeter*!
- 36 Don't overuse your calculator.** Your calculator can be handy on the the Math with Calculator section, but don't overuse it. If you're doing a lot of calculator work for a problem, you're probably making it too hard. Keep it simple.
- 37 Re-read the question.** Before finalizing your answer, re-read the question to be sure you've answered the right question. If it asks for $5x$, don't give the value for x !

Essay

- 38 Be ready for the essay.** If you are taking the Essay component of the SAT, you will need to go in to the test with a clear understanding of what SAT essay readers are looking for: an essay that shows good reading comprehension, thorough rhetorical analysis, logical organization, and strong writing skills.
- 39 Put aside 20 minutes.** When the essay section starts, take at least 20 minutes to read the target essay carefully, analyze it, and plan your response, as discussed in Chapter 6. You should still have plenty of time to write a solid essay, and it will flow much more easily.
- 40 Write at least 5 paragraphs.** According to The College Board, a good SAT essay "is well organized and clearly focused, demonstrating clear coherence and smooth progression of ideas." This means that you must use paragraphs effectively. Think of your paragraphs as the "stepping stones" of your essay. Three or four stepping stones don't make for much of a journey, do they?

The 5 Top SAT Calculator Tips

1. Don't Overuse the Calculator

Even though a calculator is permitted on one of the SAT Math sections, don't let your calculator think for you. The SAT Math Test is more of a reasoning test than a calculation test. If you find yourself depending on your calculator for every question, you need to wean yourself off of it and start working on your thinking skills!

Of course, smart calculator use is occasionally helpful, as the following examples show.

2. Know How to MATH►FRAC

Let's say you're solving an SAT math problem about probabilities and you get $34/85$ as an answer, but the choices are

- A. $4/17$
- B. $2/7$
- C. $2/5$
- D. $3/7$
- E. $7/17$

Did you mess up? No—you just have to simplify. Here, a TI-83 or similar calculator with ►FRAC might save you time. Type "34/85" and enter, then press the MATH button and then ►FRAC. Like magic, it will convert the fraction to lowest terms: $2/5$. Sweet!

On "grid in" questions, it's also a good idea to MATH►FRAC any decimal answer you get to make sure that it gives a fraction that can fit into the grid. If not, you've probably done something wrong!

3. Know How to Get a Remainder

Consider this math question: The tables at a wedding reception are set up to accommodate 212 people. There are 24 tables, some seating 8 people and the rest seating 9 people. How many 9-seat tables are there?

Without getting into the details, the answer is simply the remainder when 212 is divided by 24. You could do this by long division, but you can probably do it faster with a calculator:

Enter the division problem and enter: $212 \div 24 = 8.833333 \dots$

Subtract the integer part: $ANS - 8 = 0.833333 \dots$

Multiply by the original divisor: $ANS \times 24 = 20$

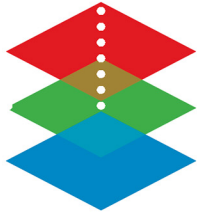
So the answer is 20! Memorize this handy procedure to streamline "remainder" problems.

4. Beware of "Killer Program" Gimmicks

Don't believe your friends who tell you they have a killer "SAT-busting" calculator program. They don't. These are usually gimmicks that waste time rather than save it. Again, if you're depending on your calculator to do anything but check basic calculations, you're thinking about the SAT in the wrong way.

5. Get Fresh Batteries

Even if you don't use your calculator much, you won't be happy if it dies halfway through the SAT. Put in a set of fresh batteries the night before!



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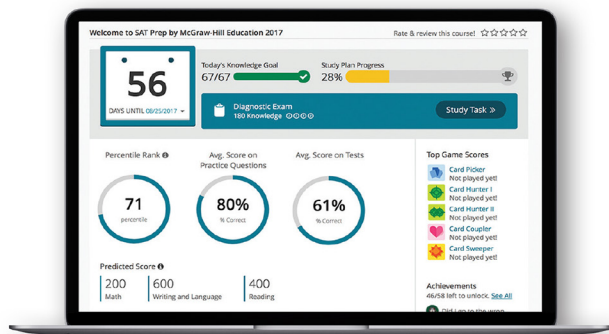
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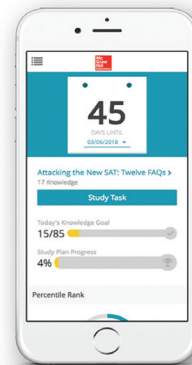
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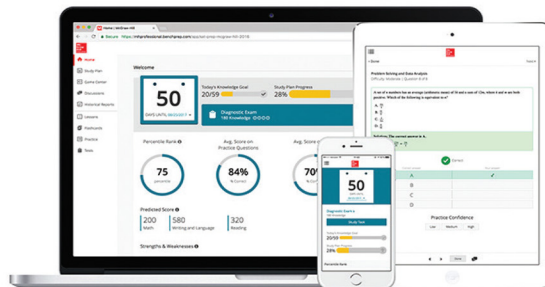


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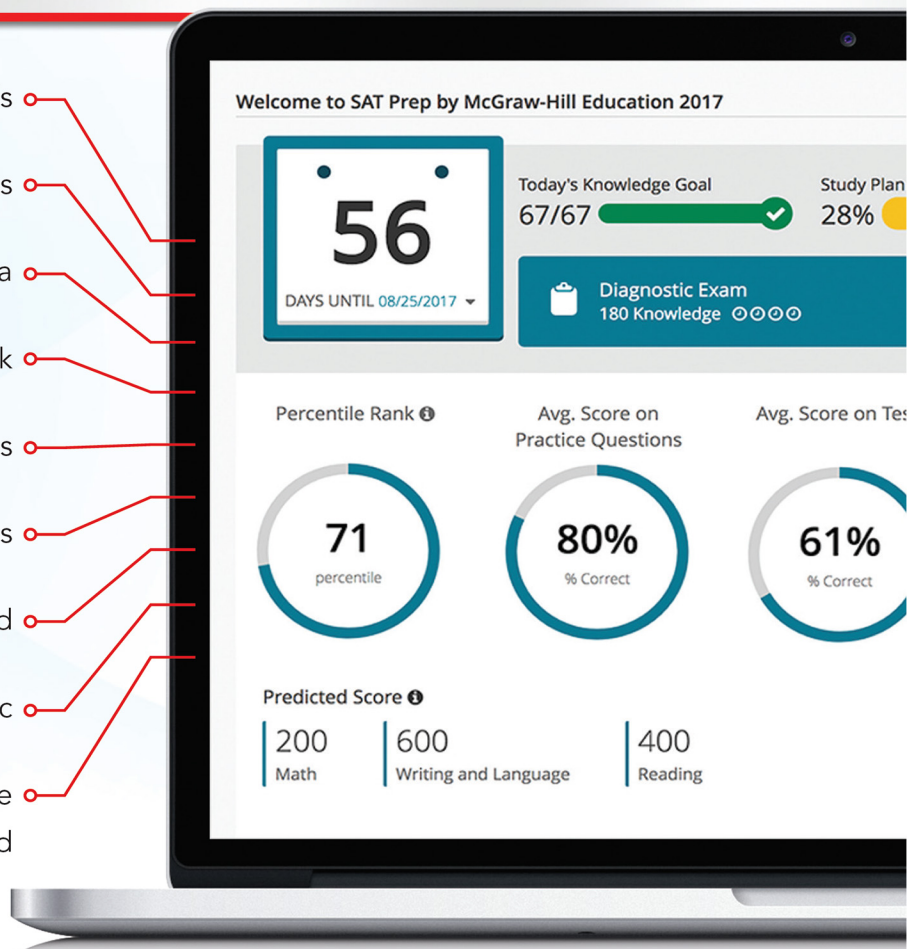
Digital Flashcards to memorize key concepts

Practice Questions to build test readiness

Study Tools to focus study where most needed

Positive Feedback as you master each topic

Advanced Analytics from the Intelligent Report Dashboard



Representation of typical Cross-Platform study plan; content varies by title

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Print Book

This print book gives you the tools you need to ace the test. In its pages you'll find smart test-taking strategies, in-depth reviews of key topics, and ample practice questions and tests. See the Welcome section of your book for a step-by-step guide to its features.

Online Platform

The Cross-Platform Prep Course's online platform gives you additional study and practice content that you can access *anytime, anywhere*. You can create a personalized study plan based on your test date that sets daily goals to keep you on track. Integrated lessons provide important review of key topics. Practice questions, exams, and flashcards give you the practice you need to build test-taking confidence. The game center is filled with challenging games that allow you to practice your new skills in a fun and engaging way. You can interact with other test-takers in the discussion section and gain valuable peer support.

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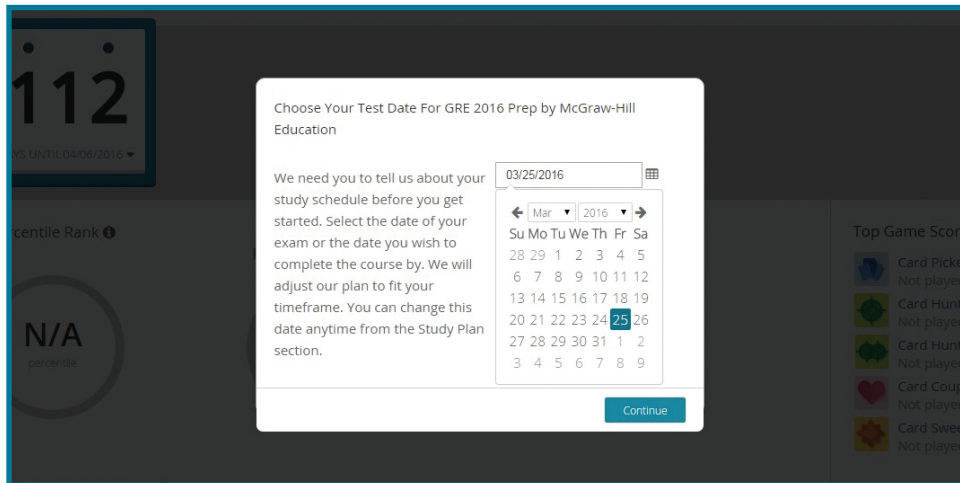
Click "Start Studying" to enter the platform

It's as simple as that. You're ready to start studying online.



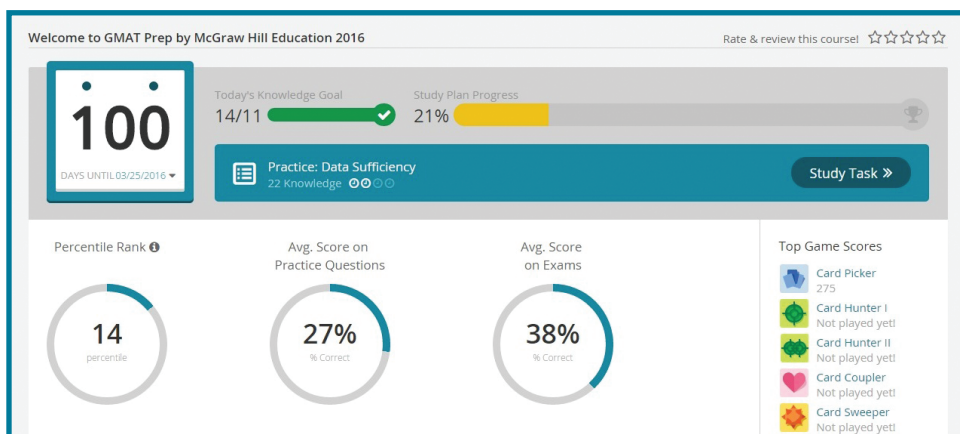
Your Personalized Study Plan

First, select your test date on the calendar, and you're on your way to creating your personalized study plan. Your study plan will help you stay organized and on track and will guide you through the course in the most efficient way. It is tailored to *your* schedule and features daily tasks that are broken down into manageable goals. You can adjust your end date at any time and your daily tasks will be reorganized into an updated plan.



You can track your progress in real time on the Study Plan Dashboard. The Today's Knowledge Goal progress bar gives you up-to-the minute feedback on your daily goal. Fulfilling this is the most efficient way to work through the entire course. You can get an instant view of where you stand in the entire course with the Study Plan Progress bar.

If you need to exit the program before completing a task, you can return to the Study Plan Dashboard at any time. Just click the Study Task icon and you can automatically pick up where you left off.

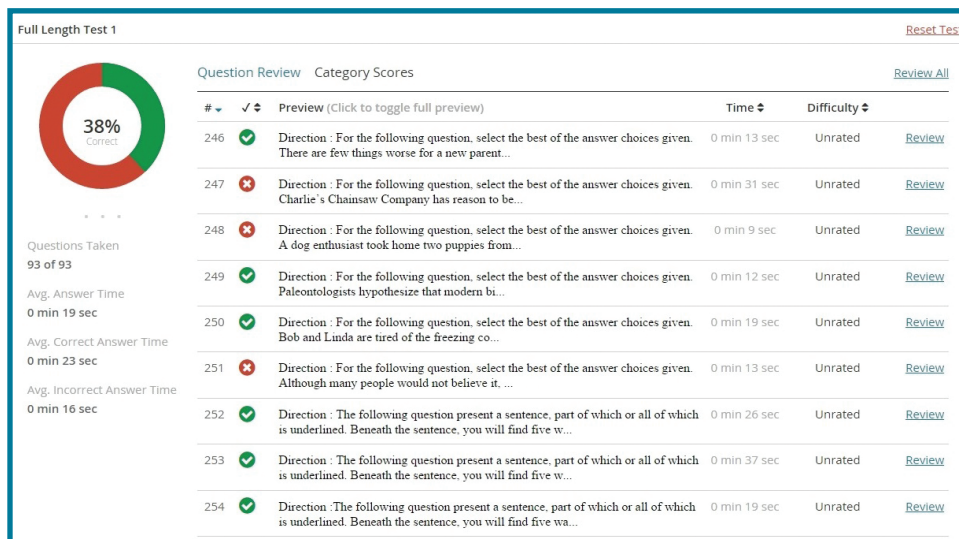




Practice Tests

One of the first tasks in your personalized study plan is to take the Diagnostic Test. At the end of the test, a detailed evaluation of your strengths and weaknesses shows the areas where you need to focus most. You can review your practice test results either by the question category to see broad trends or question-by-question for a more in-depth look.

The full-length tests are designed to simulate the real thing. Try to simulate actual testing conditions and be sure you set aside enough time to complete the full-length test. You'll learn to pace yourself so that you can get the best possible score on test day.



Lessons

The lessons in the online platform are divided into manageable pieces that let you build knowledge and confidence in a progressive way. They cover the full range of topics that appear on your test.

After you complete a lesson, mark your confidence level. (You must indicate a confidence level in order to count your progress and move on to the next task.) You can also filter the lessons by confidence levels to see the areas you have mastered and those that you might need to revisit.

Use the bookmark feature to easily refer back to a concept or leave a note to remember your thoughts or questions about a particular topic.

Lessons [Table of Contents](#) [Confidence Levels](#) [Notes](#) [Bookmarks](#) [Bookmark this section](#)

← Critical Reasoning Reading [Bookmark?](#)

Critical Reasoning Reading

The reading techniques most appropriate for Critical Reasoning questions are not the same as those best suited for Reading Comprehension questions. First, you will see only one or, rarely, two questions for each Critical Reasoning passage, so it is very beneficial to *read the question stem before reading the passage* so that you will know what to look for: assumptions, conclusions, structural elements, and so on. Second, every word in a Critical Reasoning passage could be significant to the answer, so you must read every word and understand every idea in the passage. The passages are short, so it is worth your time to read slowly and to understand fully the argument presented.

You must also *read critically*. What this means is to read with an eye toward the unstated assumptions in the argument, as well as toward its potential strengths and weaknesses. This is why it is important to read the question stem before reading the passage: you will know whether you are looking for a flaw in the argument, an unstated assumption, or a general understanding of the argument's logic. Reading with the question in mind will help you to identify the relevant parts of the argument with greater efficiency and accuracy.

Always try to formulate at least a rough answer before you look at the answer choices. The wrong answers are designed to confuse and mislead you, so don't look to the answers for help. If you have at least a vague idea of what the correct answer should look like, you will be able to distinguish more quickly between the correct and incorrect answer choices.

[Report Content Errors](#)

Lesson Confidence [Bookmark?](#)

High

Medium

Low

[Continue >](#)



Practice Questions

All of the practice questions are based on real-life exams and simulate the test-taking experience. The Review Answer gives you immediate feedback on your answer. Each question includes a rationale that explains why the correct answer is right and the others are wrong. To explore any topic further, you can find detailed explanations by clicking the “Help me learn about this topic” link.

Quantitative-Data Sufficiency This question: 00:17 Total: 00:17 [Done practicing](#)

Question 1 of 24 [Review Answer](#)

Direction: The following data sufficiency problem consist of a question and two statements, labeled (1) and (2), in which certain data are given. You have to decide whether the data given in the statements are *sufficient* for answering the question.

A. Statement (1) **ALONE** is sufficient, but statement (2) alone is not sufficient.
 B. Statement (2) **ALONE** is sufficient, but statement (1) alone is not sufficient.
 C. **BOTH** statements **TOGETHER** are sufficient, but **NEITHER** statement **ALONE** is sufficient.
 D. **EACH** statement **ALONE** is sufficient.
 E. Statements (1) and (2) **TOGETHER** are **NOT** sufficient.

Q. Is x an integer?

(1) x is evenly divisible by $\frac{1}{2}$
 (2) x is evenly divisible by 2.

Solution:
The correct answer is B.
 A reminder: The question stem starts with *is*, so this is a *yes or no* problem. The first step is to determine whether statement (1) is sufficient, which we can do by trying out some real numbers. If x is 2, which is evenly divisible by $\frac{1}{2}$ then the answer would be *yes*. But if x were 1.5, which is also evenly divisible by $\frac{1}{2}$ then the answer would be *no*. Since you can get either *yes or no*, statement (1) is not sufficient and you should cross off A and D. Now let's move on to statement (2). There are no non-integer numbers that are divisible by 2, so *yes* is the only possibility. Statement (2) is sufficient, so we can eliminate C and E. Thus the answer is B.

Incorrect

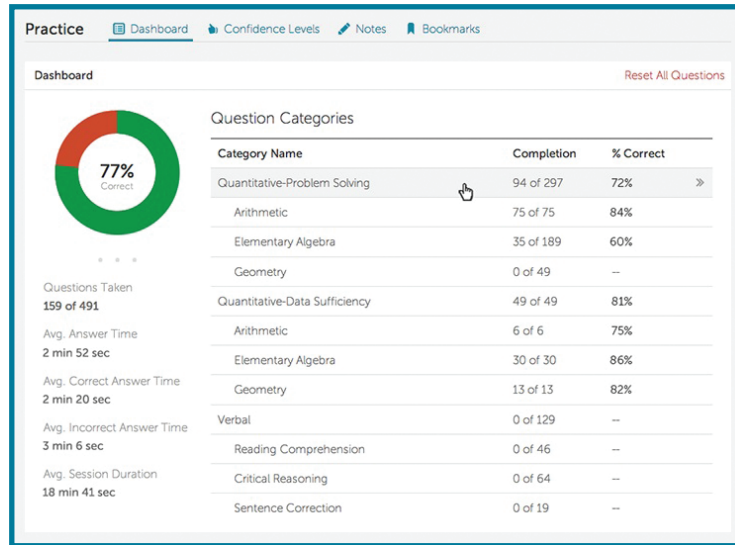
[Help me learn about this topic](#)

Correct answer	Your answer
A	<input type="checkbox"/>
B	<input checked="" type="checkbox"/>
C	<input type="checkbox"/>
D	<input checked="" type="checkbox"/>
E	<input type="checkbox"/>

[Continue](#)

Difficulty Level: Unrated

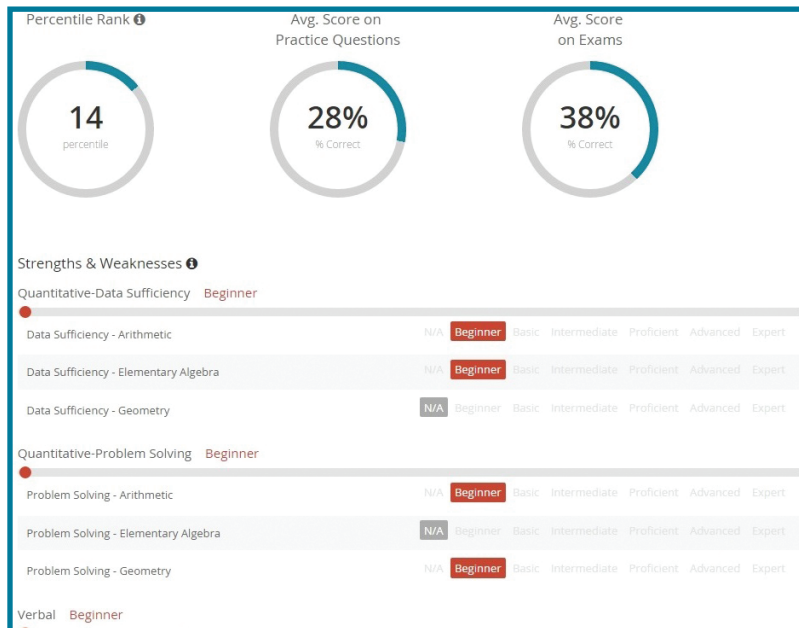
You can go to the Practice Dashboard to find an overview of your performance in the different categories and sub-categories.



Dashboard

Visit the dashboard to see personalized information on your progress and performance. The Percentile Rank icon shows your position relative to all the other students enrolled in the course. You can also find information on your average scores in practice questions and exams.

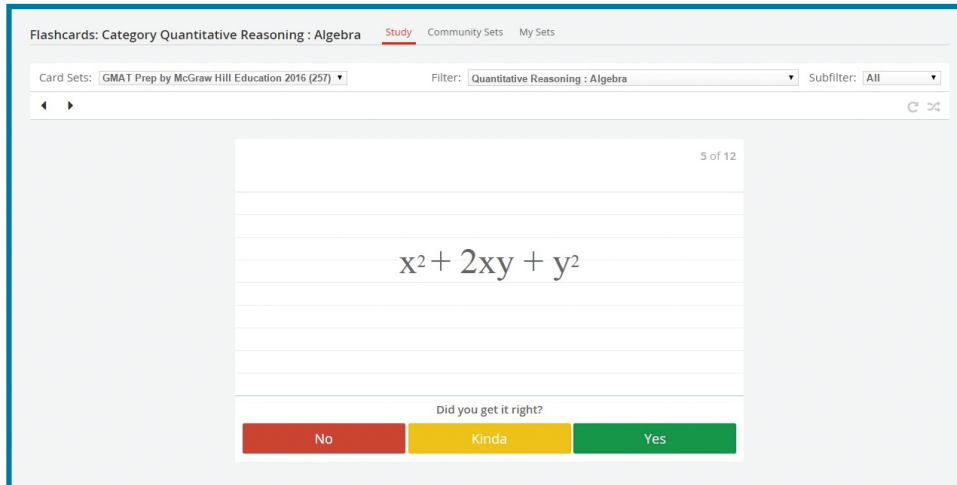
A detailed overview of your strengths and weaknesses shows your proficiency in a category based on your answers and difficulty of the questions. By viewing your strengths and weaknesses, you can focus your study on your weaker spots.



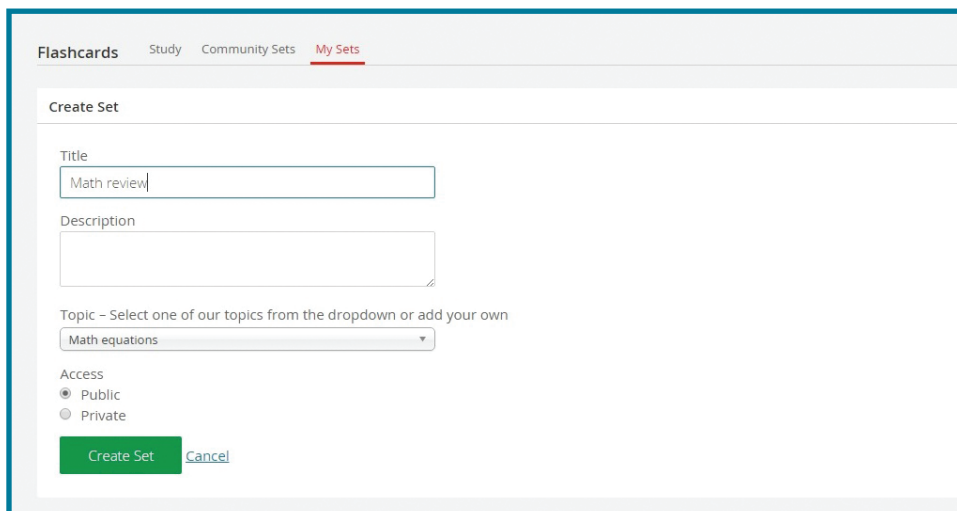


Flashcards

Hundreds of flashcards are perfect for learning key terms quickly, and the interactive format gives you immediate feedback. You can filter the cards by category and confidence level for a more organized approach. Or, you can shuffle them up for a challenge.



Another way to customize the flashcards is to create your own sets. You can keep these private or share or them with the public. Subscribe to Community Sets to access sets from other students preparing for the same exam.





Game Center

Play a game in the Game Center to test your knowledge of key concepts in a challenging but fun environment. Up the difficulty level and complete the games quickly to build the highest score. Be sure to check the leaderboard to see who's on top.

Game Center Dashboard Card Picker Card Hunter I Card Hunter II Card Coupler Card Sweeper

Card Picker
Your highest score: 128
You rank: 2182
[Start playing](#)
[Leaderboard](#)
Top 1: Julie - 2204679
Top 2: Nathaniel - 1215960
Top 3: Jennifer - 470619

Card Hunter I
Your highest score: 235
You rank: 1510
[Start playing](#)
[Leaderboard](#)
Top 1: Swathi - 1983
Top 2: Anne - 1962
Top 3: Nancy - 1958

Card Hunter II
Your highest score: 222
You rank: 826
[Start playing](#)
[Leaderboard](#)
Top 1: Laura - 40197
Top 2: R.M. - 35726
Top 3: Melisa - 26603

Card Coupler
Your highest score: 611
You rank: 516
[Start playing](#)
[Leaderboard](#)
Top 1: Katie - 1392
Top 2: Tirzah - 1362
Top 3: Amanda - 1358

Card Sweeper
Your highest score: 0
You rank: Not yet determined
[Start playing](#)
[Leaderboard](#)
Top 1: Lauren - 16201
Top 2: Jesse - 12237



Social Community

Interact with other students who are preparing for your test. Start a discussion, reply to a post, or even upload files to share. You can search the archives for common topics or start your own private discussion with friends.

Discussions Public Private

Discuss My Discussions

What do you want to discuss...

Sophie Leary 19 hours ago [Join discussion](#)
For the plugging in example, is there an error in the wording? Because the answer is B, and I understand how they got that, BUT the 10s digit (6) is NOT twice the 100s digit (9). Am I reading it wrong or is this an error in wording?
[reply](#)

Erik Smith a day ago [Join discussion](#)
Hmm... no exponents? Like 80% of the practice questions I just did used exponents.
[reply](#)

Teresa McLean 2 months ago
Answer D does seem to be stated in these sentences... In Latin America the amount of public money spent on each graduate student is between 350 and 1,500 times the amount spent on the median citizen (that is, the citizen who holds the middle ground between the poorest and the richest). In the United States the discrepancy is smaller, but the discrimination is keener. ...a year in a university is disproportionately more expensive than a year in high school...

Mobile App

The companion mobile app lets you toggle between the online platform and your mobile device without missing a beat. Whether you access the course online or on your smartphone or tablet, you'll pick up exactly where you left off.

Go to the iTunes or Google Play stores and search "BenchPrep Companion" to download the companion iOS or Android [app](#). Enter your e-mail address and the same password you created for the online platform to open your account.



Now, let's get started!

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SAT

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SAT 2020

CHRISTOPHER BLACK, MA

MARK ANESTIS, MA

**and the TUTORS of
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ISBN: 978-1-26-045356-0

MHID: 1-26-045356-1

The material in this eBook also appears in the print version of this title: ISBN: 978-1-26-045355-3,

MHID: 1-26-045355-3.

eBook conversion by codeMantra

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ACKNOWLEDGMENTS

We would like to acknowledge the help of those who have contributed to this project: Elizabeth, Sarah, and Anna Black for their patience and support; Stephanie Anestis for her invaluable efforts in reading and editing the text and for her incredible love and support; and Robert, Janice, Michael, and Matthew Anestis, who also gave their insight on the work in progress. We appreciate the hard work of those at McGraw-Hill Education who made this project work and the thoughtful help of our agent, Grace Freedson. Finally, we would like to thank all the students of College Hill Coaching who have contributed to the growth of these materials over the years.

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CHAPTER 1

FAQs ABOUT THE SAT

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1 WHAT DOES THE SAT TEST?

The SAT assesses a broad range of reasoning skills in the liberal arts. It does not test specific subject knowledge, but rather the broadly applicable skills of analytical reading, analytical writing, and mathematical problem solving. Here is a more comprehensive list of SAT skills, broken down by test:

SAT Reading

- Interpreting, analyzing, and drawing inferences from college-level texts across the liberal arts and sciences such as arguments, narratives, and personal or expository essays
- Interpreting and drawing inferences from data in the form of graphs, tables, and diagrams that accompany reading passages

SAT Writing and Language

- Analyzing sentences and paragraphs in terms of their grammatical correctness and semantic coherence

- Analyzing essays in terms of their overall development, tone, and effectiveness

SAT Math

- Solving algebraic problems involving equations, inequalities, systems, formulas, and functions
- Solving data-analysis problems involving concepts such as ratios, proportions, percentages, units, and numerical relationships
- Solving problems in advanced mathematics involving concepts such as quadratics, polynomials, angles, polygons, areas, volumes, exponentials, complex numbers, and trigonometry

SAT Essay (Optional)

- Writing an effective essay that analyzes and critiques a given argumentative passage

2 WHAT IS THE FORMAT OF THE SAT?

The SAT is a 3-hour test (3 hours 50 minutes with Essay) consisting of four mandatory sections and an optional Essay. It consists of four or five sections: Reading, Writing and Language, Math without calculator, Math with calculator, and an optional Essay.

1. Reading Test	52 questions	65 minutes
2. Writing and Language Test	44 questions	35 minutes
3. Mathematics Test (No calculator)	20 questions	25 minutes
4. Mathematics Test (Calculator)	38 questions	55 minutes
5. Essay (optional)	1 question	50 minutes

3 HOW IS THE SAT SCORED?

The SAT composite score (400–1600) is the sum of the Reading and Writing score (200–800) and the Math score (200–800). The Essay is scored on a scale of 6–24 broken down into three sub-scores: reading (2–8), analysis (2–8),

and writing (2–8). In addition, the College Board provides 14 additional “Insight Scores” as shown in the table that follows.

SAT Insight Scores

	Composite Score (400–1600)			Optional
Sections (200–800)	Math	Reading and Writing		
Test Scores (10–40)	Math	Writing and Language	Reading	Essay (6–24)
Cross-Test Scores (10–40)	Analysis in History/Social Studies			
	Analysis in Science			
Subscores (1–15)	Heart of Algebra	Relevant Words in Context		Reading (2–8)
	Problem Solving and Data Analysis	Command of Evidence		Analysis (2–8)
	Passport to Advanced Math	Expression of Ideas		Writing (2–8)
		Standard English Conventions		

4 WHAT WILL COLLEGES DO WITH MY SAT SCORES?

Your SAT scores show colleges your readiness to do college-level work. Students with high SAT scores are more likely to succeed with college-level math, writing, and reading assignments. SAT scores correlate strongly with post-college success, particularly in professions like medicine, law, the humanities, the sciences, and engineering. Students with high SAT scores are more likely to graduate from college and to have successful careers after college.

But let's face it: one reason colleges want you to send them SAT scores is that high scores make *them* look good. The higher the average SAT score of their applicants, the better their rankings and prestige. This is why most colleges cherry-pick your top subscores if you submit multiple SAT results. (It's also why some colleges have adopted "SAT-optional" policies: only the high-scoring students are likely to submit them, and so the college's average scores automatically increase, thereby improving its national rankings.) In addition to your SAT

scores, most colleges are interested in your grades, your curriculum, your recommendations, your leadership skills, your extracurricular activities, and your essay. But standardized test scores are becoming more important as colleges become more selective. High SAT scores provide you with an admission advantage, even if the college does not require them. Some large or specialized schools will weigh test scores heavily. If you have any questions about how heavily a certain college weighs your SAT scores, call the admissions office and ask.

The majority of colleges "superscore" your SAT, which means that they cherry-pick your top SAT Reading and Writing score and your top SAT Math score from all of the SATs you submit. So, for instance, if you submit your March SAT scores of 520R 610M (1130 composite) and your June SAT scores of 550R 580M (1130 composite), the college will consider your SAT score to be 550R 610M (1160 composite). Nice of them, huh?

5 WHAT CONTROL DO I HAVE OVER MY SAT SCORES?

No college will see any of your SAT or Subject Test scores until you choose to release them to that particular school. Most colleges also allow you to use Score Choice to select which particular SAT and SAT Subject Test scores are submitted to the colleges among all that you've taken. Some colleges, however, may request that you submit all scores of all SATs you've taken. Typically, colleges do this to give you the maximum possible SAT "superscore."

So don't worry about taking the SAT two or three times, if you need to. In fact, most colleges encourage students to take multiple tests, since one data point isn't as trustworthy as multiple data points. But don't go overboard. If you take it more than four times, a college might think you're test-obsessed.

6 HOW SHOULD I PREPARE FOR THE SAT?

“Start where you are. Use what you have. Do what you can.”
—Arthur Ashe

Step 1: Make a testing schedule

First, decide when you will take your first SAT. Sit down with your guidance counselor early in your junior year and work out a full testing schedule for the year, taking into account the SAT, SAT Subject Tests, AP tests, and possibly the ACT. Once you have decided on your schedule, commit yourself to beginning your SAT preparation at least 3 months prior to your first SAT. Commit to setting aside 30–40 minutes per night for review work and practice, and to taking at least two or three full-scale practice tests on the weekends.

Step 2: Take a diagnostic SAT or two

When you’re ready to begin your SAT preparation (ideally 3 months before your SAT), you’ll first need to assess your readiness. Chapter 2 contains a full-scale practice SAT. It requires 3 hours (or 3 hours and 50 minutes if you include the essay). Take it on a Saturday morning, if possible, at roughly the time you will start the real SAT (around 8:00 a.m.), and make sure that you have a quiet place, a stopwatch, a calculator, and a few #2 pencils. This will give you a solid idea of what the experience of taking the new SAT is like.

Step 3: Use the lessons in this book

The detailed answer keys after each practice test will give you plenty of feedback about the topics that you may need to review in order to prepare for your SAT. If you set aside about 30 minutes per night to work through the chapters, review the lessons, and complete the exercises in this book, you can make substantial progress and see big SAT score improvements in just a few weeks. But to get the full benefit of this book, you should start at least three months before your SAT.

Step 4: Take practice tests regularly and diagnose your performance

Practice is the key to success. This book includes several “heavyweight” practice SATs in Chapter 11 (that is, tests that are slightly harder than the real SAT). Use them. Take one every week or two to assess your progress as you work through the specific skills review in Chapters 3–10.

Step 5: Register at the College Board and Khan Academy and take advantage of their online materials

The College Board and Khan Academy provide free online SAT practice materials, such as 8 full-scale practice SATs that can be scored automatically with a handy

smartphone app, and a “10 SAT Questions Per Day” service that sends you a daily e-mail with a link to online practice to keep your skills sharp.

Register on Khan Academy as an SAT student to take advantage of these free review materials, and check in regularly for new updates and additions.

Step 6: Read often and deeply

Engaging big ideas and honing your analytical reading skills are keys to success in college and on the SAT. Make a point of working your way through these books and checking these periodicals regularly.

Online/Periodical

The New York Times (Op-Ed, Science Times, Front Page)
BBC News (Views, Analysis, Background)
The Atlantic (Feature Articles)
Slate (Voices, Innovation)
Scientific American (Feature Articles)
The Economist (Debate, Science & Technology)
TED Talks (Innovation, Culture, Politics, Inspiration)
The New Yorker (Talk of the Town, Feature Articles)
ProPublica (Feature Articles)
Edge (Essays)
Radiolab (Weekly Podcast)

Books

To Kill a Mockingbird, Harper Lee
Macbeth, William Shakespeare
Frankenstein, Mary Shelley
The Color Purple, Alice Walker
Pride and Prejudice, Jane Austen
Jane Eyre, Charlotte Bronte
Heart of Darkness, Joseph Conrad
Narrative of the Life of Frederick Douglass, Frederick Douglass
The Great Gatsby, F. Scott Fitzgerald
Walden, Henry David Thoreau
The American Language, H. L. Mencken
Notes of a Native Son, James Baldwin
The Stranger, Albert Camus
Night, Elie Wiesel
Animal Farm, George Orwell
Things Fall Apart, Chinua Achebe
The Language Instinct, Steven Pinker
The Mismeasure of Man, Stephen J. Gould
The Republic, Plato
A People’s History of the United States, Howard Zinn
Guns, Germs, and Steel, Jared Diamond
A Short History of Nearly Everything, Bill Bryson

Step 7: Take strong math courses

Challenge yourself with strong math courses that introduce you to the ideas, skills, and methods or advanced mathematics, such as trigonometry, analysis of polynomials, statistical reasoning, plane geometry, and even complex numbers. These advanced topics have become a greater focus for both the SAT and ACT.

Step 8: Take strong writing courses

Take courses from teachers who emphasize strong writing skills, particularly by giving challenging writing assignments and providing timely and detailed feedback. Reading and writing skills are at the core of both the SAT and the ACT, so working with strong reading and writing teachers is invaluable.

7 HOW CAN I GET THE MOST OUT OF MY SAT STUDY SESSIONS?

- 1. Create a schedule, a study log, and a place to study.** Stick to a firm schedule of 30–40 minutes a day for SAT preparation. Write it down in your daily planner and commit to it like you would to a daily class. Also, keep a log of notes for each study session, including key strategies, important formulas, vocabulary words, and advice for your next test. Then make an effective study space: a well-lit desk with a straight-back chair, plenty of pencils, a timer for practice tests, flashcards, your study log, and even a stash of brain-healthy snacks.
- 2. Eliminate distractions.** Turn off all alerts on your phone and laptop, and tell everyone in the house that this is your study time. Make sure everyone is in on the plan. Even kick the dog out of the room.
- 3. Stick to focused 30- to 40-minute sessions.** Set a very clear agenda for each study session, such as “Master six new roots and complete the first half of Algebra Practice 4 in Chapter 7” or “Read and annotate one complete New York Times Op-Ed and read Lesson 2 in Chapter 9.” Then find your study spot, shut out all distractions, and set to work. Try not to go beyond 40 minutes for each session: stay focused and engaged, and keep it brisk.
- 4. Do 30-second checks.** Once you’ve completed your session, take out your study log. Give yourself 30 seconds to write down the most important idea(s) that helped you through that study session. Reread your notes just before you begin your next session.
- 5. Learn it like you have to teach it.** Now step away from your log and imagine you have to run into a class of eighth graders and teach them what you just learned. How would you communicate these ideas clearly? What examples would you use to illustrate them? What tough questions might the students ask, and how would you answer them? How can you explain the concepts and strategies in different ways? How can you help the students manage potential difficulties they might have in a testing environment?
- 6. Sleep on it.** A good night’s sleep is essential to a good study program. You need at least eight hours of sleep per night. To make your sleep as effective as possible, try to fall asleep while thinking about a challenging problem or strategy you’re trying to perfect. As you sleep, your brain will continue to work on the problem by a process called consolidation. When you awake, you’ll have a better grasp on the problem or skill whether you realize it or not.
- 7. Make creative mnemonics.** Whenever you’re challenged by a tough vocabulary word, grammar rule, or mathematical concept, try to visualize the new idea or word as a crazy, colorful picture or story. The memory tricks are called mnemonics, and the best ones use patterns, rhymes, or vivid and bizarre visual images. For instance, if you struggle to remember what a “polemic” is, just turn the word into a picture based on its sound, for instance a “pole” with a “mike” (microphone) on the end of it. Then incorporate the meaning into the picture. Since a polemic is a “strong verbal attack, usually regarding a political or philosophical issue,” picture someone having a vehement political argument with someone else and hitting him over the head with the “pole-mike.” The crazier the picture, the better. Also, feel free to scribble notes as you study, complete with helpful drawings. Write silly songs, create acronyms—be creative.
- 8. Consider different angles.** Remember that many math problems can be solved in different ways: algebraically, geometrically, with tables, through guess-and-check, by testing the choices, etc. Try to find elegant, simple solutions. If you struggled with a problem, even if you got it right, come back to it later and try to find the more elegant solution. Also, consider experimenting with pre-test rituals until you find one that helps you the most.
- 9. Maintain constructive inner dialogue.** Constantly ask yourself, What do I need to do to get better? Do I need to focus more on my relaxation exercises? Should I try to improve my reading speed? Should I ask different questions as I read? Should I refresh myself on my trigonometry? Having a clear set of positive goals that you reinforce with inner dialogue helps you to succeed. Banish the negative self-talk. Don’t sabotage your work by saying, “This is impossible,” or “I stink at this.”

10. **Make a plan to work through the struggles.** Before you take each practice test, have a clear agenda. Remind yourself of the key ideas and strategies for

the week. But remember that there will always be challenges. Just meet them head on and don't let them get you down.

8 WHEN SHOULD I TAKE THE SATS AND SUBJECT TESTS?

Most competitive colleges require either SAT or ACT scores from all of their applicants, although some schools allow you to choose whether or not to submit standardized test scores with your application. Many competitive colleges also require two or three Subject Test scores. The Subject Tests are hour-long tests in specific subjects like mathematics, physics, chemistry, foreign languages, U.S. history, world history, and literature.

If you want to be able to apply to any competitive college in the country, plan to take the SAT at least twice, as well as two to four SAT Subject Tests, by the end of spring semester of junior year, and retake any of those tests, if necessary, in the fall of your senior year. This way, you will have a full testing profile by the end of your junior year, and you'll have a much clearer picture of where you stand before you start your college applications. Also, if

you plan well, you will have some choices about which scores to submit.

Even if your favorite colleges don't require standardized tests, you may be able to submit them anyway to boost your application. The Subject Tests, specifically, can provide a strong counterbalance to any weaknesses in your grades.

Take your Subject Test when the subject material is fresh in your mind. For most students, this is in June, just as you are preparing to take your final exams. However, if you are taking AP exams in May, you might prefer to take the SAT Subject Tests in May, also. Learn which SAT Subject Tests your colleges require, and try to complete them by June of your junior year. You can take up to three SAT Subject Tests on any test date.

9 WHAT SHOULD I DO THE WEEK BEFORE MY SAT?

1. **Get plenty of sleep.** Don't underestimate the power of a good night's sleep. During sleep, not only do you restore balance and energy to your body, but you also consolidate what you've learned that day, and even become more efficient at tasks you've been practicing.
2. **Eat healthy.** Don't skip meals because you're studying. Eat regular, well-balanced meals.
3. **Exercise.** Stick to your regular exercise program the weeks before the SAT. A strong body helps make a strong mind.
4. **Visualize success.** In the days before your SAT, envision yourself in the test room, relaxed and confident, working through even the toughest parts of the test without stress or panic.
5. **Don't cram, but stay sharp.** In the days before the SAT, resist the urge to cram. Your best results will

come if you focus on getting plenty of sleep and staying positive and relaxed. If you're feeling anxious, take out your flashcards for a few minutes at a time, or review your old tests just to remind yourself of basic strategies, but don't cram.

6. **Keep perspective.** Remember that you can take the SAT multiple times, and that colleges will almost certainly "superscore" the results, so don't get down about any single set of test results. Also, keep in mind that colleges don't base their acceptance decisions on SAT scores alone.
7. **Lay everything out.** The night before your SAT, lay out your admission ticket, your photo ID, your #2 pencils, your calculator (with fresh batteries), your snack, and directions to the test site (if necessary). Having these all ready will let you sleep better.

CHAPTER 2

DIAGNOSTIC SAT

1. Reading Test		
65 MINUTES	52 QUESTIONS	16
2. Writing and Language Test		
35 MINUTES	44 QUESTIONS	35
3. Math Test – No Calculator		
25 MINUTES	20 QUESTIONS	48
4. Math Test – Calculator		
55 MINUTES	38 QUESTIONS	54
5. Essay (optional)		
50 MINUTES	1 QUESTION	66



ANSWER SHEET for SAT DIAGNOSTIC

Use a No. 2 pencil and fill in the entire circle darkly and completely.
If you change your response, erase as completely as possible.

SECTION 1

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| 2 | (A) (B) (C) (D) | 14 | (A) (B) (C) (D) | 26 | (A) (B) (C) (D) | 38 | (A) (B) (C) (D) | 50 | (A) (B) (C) (D) |
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SECTION 2

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ONLY ANSWERS ENTERED IN THE CIRCLES IN EACH GRID WILL BE SCORED.
YOU WILL NOT RECEIVE CREDIT FOR ANYTHING WRITTEN IN THE BOXES ABOVE THE CIRCLES.

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| 2 (A) (B) (C) (D) | 8 (A) (B) (C) (D) | 14 (A) (B) (C) (D) | 20 (A) (B) (C) (D) | 26 (A) (B) (C) (D) |
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| 4 (A) (B) (C) (D) | 10 (A) (B) (C) (D) | 16 (A) (B) (C) (D) | 22 (A) (B) (C) (D) | 28 (A) (B) (C) (D) |
| 5 (A) (B) (C) (D) | 11 (A) (B) (C) (D) | 17 (A) (B) (C) (D) | 23 (A) (B) (C) (D) | 29 (A) (B) (C) (D) |
| 6 (A) (B) (C) (D) | 12 (A) (B) (C) (D) | 18 (A) (B) (C) (D) | 24 (A) (B) (C) (D) | 30 (A) (B) (C) (D) |

ONLY ANSWERS ENTERED IN THE CIRCLES IN EACH GRID WILL BE SCORED.
YOU WILL NOT RECEIVE CREDIT FOR ANYTHING WRITTEN IN THE BOXES ABOVE THE CIRCLES.

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