$\mathbf{\hat{\nabla}}$ CollegeBoard

K-12 Educator Brief The College and Career Readiness Benchmarks for the SAT[®] Suite of Assessments

The College and Career Readiness Benchmarks for the SAT $^\circ$ Suite of Assessments

The College Board Readiness and Success System helps students and educators prepare for success after high school. The SAT[®] Suite of Assessments — including the SAT, the PSAT/NMSOT[®], the PSAT[™] 10, and the PSAT[™] 8/9 — is an essential component of the system. These assessments focus on the few things that research shows matter most for college and career readiness, and in doing so reflect what students are already learning in school. They help students and educators monitor academic progress and prepare students to achieve their college and career goals. Scores from these assessments are on a common score scale and integrated into comprehensive score reports so students and educators can more easily track and measure academic growth over time.

The Benchmarks Defined

Each assessment in the SAT Suite has an associated set of metrics called the **college and career readiness benchmarks**. The new college and career readiness benchmarks are based on actual student success in entry-level college courses. Benchmarks are set at the section level (Math, Evidence-Based Reading and Writing) for each assessment and represent increasing levels of achievement as students progress from grade eight through grade 12. The **SAT benchmark scores** represent a 75% likelihood of a student achieving at least a C grade in a first-semester, credit-bearing college course in a related subject.

- » The SAT Math benchmark is the SAT Math section score associated with a 75% chance of earning at least a C in first-semester, creditbearing, college-level courses in algebra, statistics, precalculus, or calculus.
- » The SAT Evidence-Based Reading and Writing benchmark is the SAT Evidence-Based Reading and Writing section score associated with a 75% chance of earning at least a C in first-semester, creditbearing, college-level courses in history, literature, social science, or writing.

The grade-level benchmark scores are based on expected student growth toward the SAT benchmarks at each grade. Where SAT benchmarks indicate likelihood of success in college, grade-level benchmarks indicate whether a student is on track for college and career readiness for their grade. The benchmarks are set to reflect typical annual growth from year to year from eighth through 12th grades, where the SAT benchmarks reflect a high probability of successfully earning a passing grade in courses specifically linked to the two SAT section scores.

The benchmarks for the SAT Suite of Assessments work together as a system, making it easier to evaluate how students are progressing

year-over-year toward college readiness. They provide actionable feedback and detailed information to students and educators in score reports, including areas of academic strength and weakness, as well as actionable steps for improvement. They also present a more straightforward understanding of college and career readiness by using a definition that's familiar to students and educators.

Comparing the College and Career Readiness Benchmarks with the Pre-Redesign Benchmarks

Prior Approach: Before the redesign of the SAT, the College Board set one SAT college readiness benchmark at 1550 for the combined scores of the three test sections: critical reading, mathematics, and writing. This number indicated a 65% probability of achieving an overall first-year college GPA of B– or higher. The pre-redesign PSAT/NMSQT 10th- and 11th-grade benchmarks were based on a similar methodology.

The pre-redesign benchmark gave students and educators a general sense of college readiness (readiness for broad success in the first year). It did not provide tools or guidance to identify the types of courses students may be ready for or the skills they had developed. Furthermore, it was not clear which skills students needed to focus on to increase their readiness for success in college courses.

Updated Approach: The SAT college and career readiness benchmarks now indicate a 75% likelihood of achieving at least a C in first-semester, credit-bearing college courses in related subjects and course work. The SAT benchmarks are designed to reflect whether or not a student has a high likelihood of being successful in subject-specific first-semester courses. The gradelevel benchmarks associated with the PSAT/NMSOT, PSAT 10, and PSAT 8/9 are based on expected student growth toward the SAT benchmarks at each grade level.

In setting the benchmarks, course grades were used as the criterion for success in specific courses. The pre-redesign benchmark was not based on first-semester college course grading practices, so students and educators may notice a change in the percentage of students meeting the new benchmarks.

Moving to a model where students can more easily understand whether they are ready for certain types of college courses — and what to do if they are not ready — ensures assessments are not a stopping point but a look toward the future, offering action steps that students can take to strengthen their college readiness skills. Previously, the SAT defined college readiness as meeting one benchmark (1550). The SAT now defines college and career readiness as meeting the section benchmark in Math and in Evidence-Based Reading and Writing.

The Rationale for the Change

There are several advantages to the change in methodology for the SAT Suite of Assessments:

To make it easier to track progress over time. The pre-redesign benchmarks were not designed to function together as a system. In contrast, the benchmarks were designed around expected student growth to make it easier to assess how students are progressing year-over-year toward college readiness.

To provide more actionable feedback. While the pre-redesign benchmarks provided educators with a general sense of their students' college readiness, they did not provide detailed feedback on specific areas of strengths and weaknesses, or resources to support students. The benchmarks now provide students with more detailed information on their scores.

To make it more straightforward for students: We are using a C grade as our new metric, as it is almost universally interpreted as satisfactory in undergraduate institutions and is less confusing to students and educators than B–. Instead of "65% likelihood," we are using "75% likelihood" to ensure that if we tell a student they are ready for college, there is a relatively small chance that they are not.

The Values of the College and Career Readiness Benchmarks

Assessment – Grade Level	Evidence-Based Reading and Writing Benchmark	Math Benchmark
SAT	480	530
Grade 11	460	510
Grade 10	430	480
Grade 9	410	450
Grade 8	390	430

Across the SAT Suite of Assessments, the benchmark scores* are as follows:

*Once students who have taken the redesigned SAT have entered college and earned course grades in the relevant subjects in 2017-18, an additional benchmark study will be conducted.

Relating the Red, Yellow, and Green Indicators to the College and Career Readiness Benchmarks

The College Board is providing insightful feedback with each of the assessments in the SAT Suite, indicating specific areas of strengths and weaknesses, along with action steps in Skills Insight[™] to accelerate growth and to help students meet and exceed the college and career readiness benchmarks by the time they are ready to attend college.

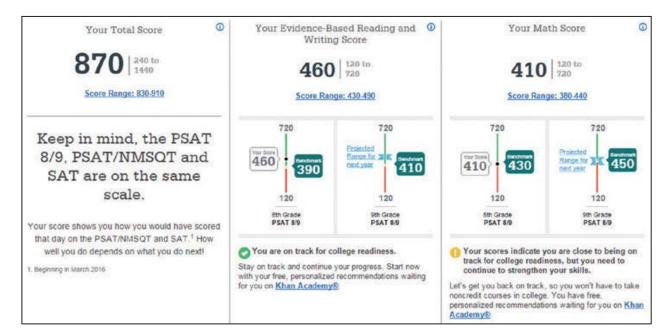


To provide students and educators with tools and guidance on where to focus studies to meet the benchmarks, the College Board has developed a color-coded system for reporting section scores, test scores, and subscores. When students view their score report, section scores will be accompanied by graphics indicating their score and its relation to the corresponding benchmark. Scores that meet or exceed the benchmark in Evidence-Based Reading and Writing or Math section will be marked in a green area on a score graphic. Scores that are below the benchmark but within one year's growth of meeting the benchmark are marked on the yellow portion of the graph. Scores that are below the benchmark and are more than one year's growth from meeting the benchmark are indicated on the red portion of the graph.

Color coding for test scores and subscores provides indicators to inform students how their performance on the test scores and subscores compares to students who are on track for college readiness. The red, yellow, and green ranges for test scores and subscores are based on the average performance of all test-takers who met the corresponding section benchmarks for their grade level compared to those who did not. The color indicators tell students:

- Red: need to strengthen skills
- Yellow: approaching the benchmark
- Green: met or exceeded the benchmark

Students may find that a section score falls in the green range, but a corresponding test score is in the yellow range. This is unusual, but is most likely to occur on the PSAT 8/9, which only has two Math subscores. The Math Test contains questions that measure additional topics in mathematics that do not appear in any subscore. If a test-taker just does well enough to meet the low end of the green range on each Math subscore (Heart of Algebra, Problem Solving and Data Analysis) but answers the other Math questions (i.e., those questions not appearing in either subscore) incorrectly, that person will not do well enough to be in the green range for the total Math Test score.



With these simple graphs and color-coded scores, students and educators can readily understand areas of strength and areas in which skill-building is needed. See Appendix B for score range values for each assessment.

Using the SAT College and Career Readiness Benchmarks

Use students' scores — available in the online score-reporting platform — to identify and accelerate students who are ahead, to support those who are behind, and to provide guidance in the academic areas where students need support. To accelerate growth toward the benchmarks, encourage students to use the information included in the online score reports to:

- » Pinpoint areas of academic strengths and weaknesses in section scores, test scores, and subscores.
- » Review Skills Insight to get targeted suggestions for improving performance.
- » Identify test questions and answer explanations in areas of difficulty to clarify errors in understanding and answer selection.
- » Link their College Board account with Official SAT Practice on Khan Academy[®] to get individualized practice plans with instruction and feedback relative to college and career readiness skills.

To access the online reporting portal, create or log in to your professional account at collegeboard.org. Contact your school Access Manager to be certain you are granted access to the K–12 reports. The benchmarks are intended to be used by policymakers, administrators, educators, and parents to monitor the academic progress of a student or groups of students as they prepare for college and careers. Use the benchmarks to:

- » Gauge the level of college readiness. Assess the effectiveness of students' academic preparation over time. Identify achievement gaps across demographic groups based on college readiness findings.
- » Identify particular skills for development. Use the color-coded test scores and subscores and the actionable suggestions in Skills Insight to focus intervention and practice activities to help students develop college and career readiness skills.
- Inform instructional and curricular enhancements. Use scorereporting resources in the online reporting portal, such as the Instructional Planning Report and Question Analysis Report, to focus on the academic skills that students need to improve their college performance. Implement changes in curriculum and instruction to meet the needs of all students.
- Strengthen academic programs and share best practices. Utilize the benchmarks as a catalyst for identifying and implementing effective instructional approaches and curriculum plans. Identify programs and courses in which students are meeting the benchmarks and replicate successful curriculum and instructional strategies to generate success in other areas.

The college and career readiness benchmarks for the SAT Suite of Assessments offer educators advantages that support students on their path to postsecondary success. Using the benchmarks from grade eight through grade 12 will allow educators to set a baseline for each student's level of college and career readiness, and monitor progress at each grade level. Students who are not on track to meet the benchmarks can engage in interventions using Skills Insight, Question Analysis, and Official SAT Practice on Khan Academy — to improve their skills and develop their readiness for college and career. Rather than acting as a barrier to college, the benchmarks inform students and educators about students' strengths and help students focus on the areas that need improvement to achieve college and career goals.

Appendix A: Frequently Asked Questions

• How does the College Board know how students will perform in their first-semester classes when the new SAT has only been administered in 2016?

Very early in the fall semester of 2014 the College Board conducted a pilot predictive validity study to provide colleges and universities with early information about the relationship between the new SAT and college grades. Fifteen four-year institutions were recruited to administer a pilot form of the new SAT to first-time, first-year students. The new SAT was administered to students under standardized conditions, and measures were taken to motivate students to perform well on the assessment. In June 2015, the participating institutions provided the College Board with first-year performance data courses taken and grades in those courses — for those students participating in the fall 2014 administration of the redesigned SAT. It is these data from the diverse sample of 2,150 students across the 15 four-year institutions in the study that inform student performance in first-year courses.

The research study, *The Redesigned SAT**: *Results from the Pilot Predictive Validity Study*, can be found at: collegereadiness.collegeboard.org/pdf/redesigned-sat-results-pilot-validity-study.pdf

• If the benchmarks are based on actual student success in entry-level college courses, what data are the College Board using to determine the benchmarks for the redesigned assessments?

We determined the college and career readiness benchmarks by gathering student data from over 200 two- and four-year institutions for the class who entered college in fall 2009. These data were weighted to match the national population of students entering two- and four-year institutions. We gathered the most recent (pre-redesign SAT) Math and Critical Reading + Writing scores for everyone in the data, then found the lowest grade in associated first-semester, entry-level courses in each group:

- » Math: Algebra, precalculus, calculus, statistics
- » CR+W: History, literature, social science, writing

For each SAT section, we found the score for which 75% of students get at least a C in the related courses. We then used the appropriate SAT concordance to convert that score to the scale of the redesigned SAT.

• What do the red, yellow, and green ranges indicate, and how are values determined for test scores and subscores?

The red, yellow, and green ranges are reported for a student's score on the Math and Evidence-Based Reading and Writing sections. They are based on comparing a student's section scores to the corresponding section benchmark scores.

Green

A student who meets or exceeds the benchmark score for their grade level will be in the green range and could be considered on track for college and career readiness for their grade. For example, an 11th-grader who meets the 11th-grade benchmark for the section will be in this range.

Red

A student who does not meet the benchmark section scores for the prior grade level will be in the red range, meaning they are more than one year behind on college and career readiness for their grade. For example, an 11th-grader who does not meet the 10th-grade benchmark for the section score will be in this range.

Yellow

A student whose section score falls between these two values will be in the yellow range and could be considered approaching college and career readiness for their grade.

To determine the red, yellow, and green values at the **test and subscore** levels, we first compute the average test score or subscore of all test-takers who met or exceeded the corresponding section benchmark — the green range — for their grade level.

Next, we compute the average test score or subscore of all testtakers who did not meet the corresponding section benchmark for their previous grade level. This average test score and subscore is the highest score in the red range. Students who score above this average, but below the green range, will fall in the yellow range. See Appendix B for score range values.

Q How can my section score fall in the green range, but my test score falls in the yellow range?

To score in the green range on a section score, a student must meet the corresponding section benchmark. To score in the green range on a test score (or subscore), a student must score above the average test score (or subscore) of all people meeting the benchmark. This means that a student who scores in the green range on all test scores and subscores associated with a section (Math or Evidence-Based Reading and Writing) has scored well above the section benchmark score. Conversely, a student who scored just above a section benchmark scored in the yellow range on at least one associated test score or subscore. The student should continue to work on skills in that particular test content area.

• Will this change make it easier for more students to meet the benchmark?

The College Board's redesigned assessments are more reflective of what students are learning in class — the same skills and knowledge they need to be ready for college. When we redesigned the tests, we also calibrated the benchmarks to appropriately reflect the new content and design and to provide more in-depth feedback to students, families, and educators.

Prior to the redesign of our assessments, the benchmarks were set to correspond to a 65% probability of obtaining a least a B- in all first-year college courses. Additionally, the pre-redesign benchmarks were not based on first-semester college course grading practices.

The new benchmarks represent the reality of grading practices in associated first-semester, college courses. In the case of the Math benchmark, this represents a first-semester, college-level algebra, statistics, precalculus, or calculus course. In the case of the Evidence-Based Reading and Writing (ERW) benchmark, this represents a first-semester, college-level history, literature, writing, or social science course. As a result, students and educators may notice a change in the percentage of students meeting the new benchmarks. For example, in the case of the ERW benchmark, the vast majority of students in those courses receive a grade of "C" or better, and the number of SAT takers who achieve these benchmarks reflects that.

Appendix B: Red/Yellow/Green Score Range Values

Score Range Values for Red/Yellow/Green Indicators on Section, Test, and Subscores

		Section Sco	ores	Test Scores			
		Evidence-Based Reading and Writing	Math	Reading	Writing and Language	Math	
SAT	Red	200-450	200-500	10–20	10–20	10–22	
	Yellow	460–470	510-520	21–29	21–30	22.5–31	
	Green	480–800	530-800	30–40	31–40	31.5–40	
11th grade	Red	160–420	160-470	8–19	8–18	8–20.5	
	Yellow	430–450	480-500	20–28	19–28	21–29.5	
	Green	460–760	510–760	29–38	29–38	30–38	
10th grade	Red	160–400	160-440	8–18	8–17	8–19.5	
	Yellow	410-420	450–470	19–26	18–26	20–27.5	
	Green	430–760	480–760	27–38	27–38	28–38	
9th grade	Red	120–380	120–420	6–18	6–16	6–18	
	Yellow	390–400	430-440	19–25	17–25	18.5–25.5	
	Green	410–720	450–720	26–36	26–36	26–36	
8th grade	Red	120–360	120-400	6–17	6–16	6–17.5	
	Yellow	370–380	410-420	18–23	17–23	18–24	
	Green	390–720	430–720	24–36	24–36	24.5–36	

		Command of Evidence	Words in Context	Expression of Ideas	Standard English Conventions	Heart of Algebra	Problem Solving and Data Analysis	Passport to Advanced Math
SAT	Red	1–6	1–6	1–6	1–5	1–6	1–6	1–6
	Yellow	7–10	7–11	7–10	6–10	7–11	7–11	7–11
	Green	11–15	12–15	11–15	11–15	12–15	12–15	12–15
11th grade	Red	1–6	1–5	1–6	1–6	1–6	1–7	1–7
	Yellow	7–10	6–10	7–10	7–10	7–11	8–11	8–11
	Green	11–15	11–15	11–15	11–15	12–15	12–15	12–15
10th grade	Red	1–6	1–5	1–6	1–5	1–6	1–6	1–6
	Yellow	7–9	6–9	7–9	6–9	7–10	7–10	7–10
	Green	10–15	10–15	10–15	10–15	11–15	11–15	11–15
9th grade	Red	1–5	1–4	1–5	1–5	1–6	1–6	N/A
	Yellow	6–9	5–10	6–10	6–9	7–10	7–10	N/A
	Green	10–15	11–15	11–15	10–15	11–15	11–15	N/A
8th grade	Red	1–5	1-4	1–4	1–4	1–6	1–6	N/A
	Yellow	6–9	5–9	5–9	5–8	7–9	7–10	N/A
	Green	10–15	10–15	10–15	9–15	10–15	11–15	N/A