SAT Subject Tests are high-school-level, content-based tests that allow students to demonstrate readiness to take college-level classes in specific subjects, independent of any specific curriculum or instructional style.

About the SAT Subject Tests

For more than 75 years, SAT Subject Tests have played an integral role in providing institutions with insights into a student’s achievement and readiness for college-level study in specific subject areas. The hour-long exams are offered in five major subject areas — mathematics, science, history, literature and languages.

SAT Subject Tests are offered six times a year in nearly 7,000 test centers in more than 170 countries. Fee waivers are available for students to take up to six SAT Subject Tests, increasing access for all students.

SAT Subject Tests continue to evolve, maintaining their vital role in the college-going process with new research studies, test and student experience enhancements and updates of student practice tools.

SAT Subject Tests Offered

SAT Subject Tests in nonlanguage subjects assess a student’s comprehension of fundamental concepts, their content knowledge, and their ability to apply that knowledge to solve routine and nonroutine problems.

SAT Subject Tests in languages assess a student’s understanding of the language and ability to communicate in that language in a variety of cultural contexts. When there is a listening component on the test, the skills assessed include reading comprehension, language usage and listening comprehension.

Rigorous Test Development

- Test development committees made up of K–12 and higher education faculty, representing a wide range of educational backgrounds and schools, help create SAT Subject Tests.
- Each SAT Subject Test question goes through a thorough test development process over a period of about two years in order to ensure reliability and fairness to all students.
- Curriculum surveys, most recently conducted in 2010, indicate that SAT Subject Tests assess not only what is being taught in high school but also what college faculty expect students to know in order to be prepared for college-level courses in specific subject areas.

To learn more about the SAT and SAT Subject Tests, visit www.collegeboard.org/hedservices.
**SAT Subject Tests in STEM**

Valuable Measures of Achievement in Math and Science

- **SAT Subject Tests Measure True Achievement** — SAT Subject Tests assess a student's grip of fundamental concepts and the ability to solve problems in specific subject areas. For example, across the SAT Subject Tests in science and mathematics, a student must study the specific discipline through a rigorous high-school level course in order to be prepared to take the corresponding test.

- **The Only National Standardized Assessments of High-School-Level Science** — The knowledge and skills measured by Subject Tests are taught in classrooms by over 82 percent of high school science teachers, as indicated by an press College Board curriculum survey.

**SAT Subject Tests in STEM**

<table>
<thead>
<tr>
<th>What it tests</th>
<th>predictor of college success</th>
<th>test variability</th>
<th>alignment to high school science courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology (Ecological)</td>
<td>The 2008 NACAC Report of the Committee on the use of Standardized Tests in Undergraduate Admission indicated that SAT Subject Tests are strong predictors for students who have scored at the upper levels in biology and chemistry. The only national standardized assessments of high-school level science, SAT Subject Tests are the best single predictor of first-year college GPA, even better than high school grades. SAT Subject Tests are more predictive where scores on the test correlate with IB/GPA and SAT scores.</td>
<td>Availability among range from 0.00 to 1.00, exceeding industry standards.</td>
<td>Requires test in one or more science course in high school: Biology, Chemistry, Physics, or Statistics. Subject Tests help students prepare for college admissions.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>The 2008 NACAC Report of the Committee on the use of Standardized Tests in Undergraduate Admission found that SAT Subject Tests in chemistry were among the top predictors of SAT scores, even better than high school grades. SAT Subject Tests are more predictive where scores on the test correlate with IB/GPA and SAT scores.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math Level I</td>
<td>The 2008 NACAC Report of the Committee on the use of Standardized Tests in Undergraduate Admission found that SAT Subject Tests in mathematics were among the top predictors of SAT scores, even better than high school grades. SAT Subject Tests are more predictive where scores on the test correlate with IB/GPA and SAT scores.</td>
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<td></td>
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</tr>
</tbody>
</table>

*In California, where the academic emphasis is on STEM fields, it is critical for us to recognize and evaluate certain SAT Subject Tests in math and science to get a stronger sense of a student’s true passion and strength in these areas. We select candidates from a talent pool of applicants, and SAT Subject Tests help us to better understand a student’s preparation for our demanding curriculum.*

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3. SAT Subject Tests in STEM.
Colleges and universities can use SAT Subject Tests™ to attract a diverse college-aspiring population and to more effectively identify students who may be interested in specific majors or areas of concentration.

- High Achieving and College Aspiring — Students who take SAT Subject Tests score about 100 points higher on each section of the SAT® and also score nearly one point higher on AP® exams in matched course areas.

- Diverse — More than 50 percent of U.S. domestic test-takers are minority students.

- Global — Over 10 percent of test-takers are international, from more than 170 countries.

- Primarily Sophomores and Juniors — More than 50 percent of students take the test before beginning their senior year.

- Signaling Interest in STEM Majors — Initial findings of a College Board study show that students who took an SAT Subject Test in mathematics or science were nearly five times more likely to declare a major in a STEM* subject area than students who took SAT Subject Tests in nonmathematics or nonscience areas.

* STEM (science, technology, engineering, mathematics)

**Primarily Sophomores and Juniors**

**Diverse**

**High Achieving and College Aspiring**

**Global**

**Signaling Interest in STEM Majors**

**Make the SAT Subject Tests Work For You**

**Valuable Measures of Achievement in Math and Science**

- SAT Subject Tests Make True Achievement — SAT Subject Tests assess a student’s grasp of fundamental concepts and the ability to solve problems in subject areas. For example, across the SAT Subject Tests in science and mathematics, a student must study the specific discipline through a rigorous high-school level course in order to be prepared to take the corresponding test.

- The Only National Standardized Assessments of High-School-Level Science — The knowledge and skills measured by Subject Tests are taught in classrooms by over 82 percent of high school science teachers, as indicated by an in press College Board curriculum survey.

**What it tests**

- New SATs and Subject Tests are designed to match high school content and are reflective of what's being taught in high school classrooms and what students need to be ready for college.

**Alignment to high school science courses**

- Results from an in-press College Board curriculum survey indicate that the SAT Subject Tests are more predictive when aligned with core classes in algebra I and II and SAT Subject Tests are included in the SAT Trend Dashboard. Monitor the volume of the SAT and SAT Subject Tests sent to your institution via the SAT Trend Dashboard.

**Predictor of college success**

- The 2008 NACAC Report of the Commission on the use of Standardized Tests in Undergraduate Admission indicated that SAT Subject Tests are strong predictors of college achievement. On March 21, 2008, the Harvard Crimson reported that Dean of Admissions and Financial Aid William R. Fitzsimmons said “Harvard’s own internal studies have proven the efficacy of SAT II (SAT Subject Tests) score in predicting academic success at Harvard.”


- 2011 College Bound Seniors Report.1, 2 Michael Chajewski and Andrew Wiley, Assessment of Students’ Academic Needs: Subject-Based Competency Requirements that are reflective of what’s being taught in high school classrooms and what students need to be ready for college. SAT Subject Tests in science and mathematics, a student must study the specific discipline through a rigorous high-school level course in order to be prepared to take the corresponding test.

**What it tests**

- Biology - Molecular
- Biology - Ecological
- Chemistry
- Physics
- Math Level II
- Math Level I
- SAT Subject Tests in STEM

**Valuable Measures of Achievement in Math and Science**

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RECRUITING

Expand and Diversify Your Prospective Applicant Pool

Colleges and universities can use SAT Subject Tests™ to attract a diverse college-aspiring population and to more effectively identify students who may be interested in specific majors or areas of concentration.

• High Achieving and College Aspiring — Students who take SAT Subject Tests score about 100 points higher on each section of the SAT® and also score nearly one point higher on AP® exams in matched subject areas. They are focused on college planning and are actively showcasing their knowledge in specific subject areas to colleges and universities.

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• Primarily Sophomores and Juniors — More than 50 percent of students take the test before beginning their senior year.

• Signaling Interest in STEM Majors — Initial findings of a College Board study show that students who took an SAT Subject Test in mathematics or science were nearly five times more likely to declare a major in a STEM* subject area than students who did not take a Subject Test in those content areas.

* STEM: Science, Technology, Engineering, Mathematics

Make the SAT Subject Tests Work For You

Always a Simple and Easy Process

• SAT Subject Test takers are now included in the College Board’s Student Search Service® (SSS®) and Enrollment Planning Service (EPS®). Leverage the power of SPS® to analyze the qualifications and behaviors of SAT Subject Test takers to inform and define the contact information you purchase through SSS.

For information, visit www.collegeboard.org/SSS or collegeboard.org/EPS.

Connect SAT Subject Test Participation as a Predictor of College Student Choice of Science, Technology, Engineering or Mathematics Majors (The College Board).

Value of SAT Subject Tests™

— SAT Subject Tests serve as valuable credit-granting and placement tools.

— 45 percent of SAT takers report an HSGPA of A- or above. SAT Subject Tests help admission officers contextualize student grades and better distinguish each student’s level of achievement in specific subject areas.

— Predict College Achievement — SAT Subject Test scores are significant predictors of college achievement. On March 21, 2008, the Harvard Crimson reported that Dean of Admissions and Financial Aid William R. Fitzsimmons said “Harvard’s own internal studies have proven the efficacy of SAT II (SAT Subject Test) scores in predicting academic success at Harvard.”


ADMISSION

Measure the Academic Burgeoning of Your Applicants

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ENROLLMENT

Connect Student Achievement with Course Placement

SAT Subject Tests serve as valuable credit-granting and placement tools.

• Placement — More than 140 U.S. colleges and universities use SAT Subject Test performance for course placement or to grant credit for certain courses.

• Competency Requirements — Many institutions, including the University of Oregon and the University of Arizona, allow students to use SAT Subject Tests to fulfill subject-based competency requirements for admission.

• Assessment of Students’ Academic Needs — SAT Subject Tests provide useful information to anticipate the remediation needs of matriculating students.

SAT Subject Tests in STEM

SAT Subject Test Participation as a Predictor of College Student Choice of Science, Technology, Engineering or Mathematics Majors (The College Board).

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What It Tests

What it tests

• Biology - Ecological
• Biology - Molecular
• Chemistry
• Math Level I
• Math Level II
• Physics

Predictor of college success

• The 2006 NACAC Report of the Commission on the Use of Standardized Tests in Undergraduate Admission (2006) indicated that the SAT Subject Tests are strong predictors that are significantly better than high school GPA and SAT scores alone.

• A 2007 University of California study found that, for engineering students, the SAT Subject Tests were more powerful predictors of first-year college GPA. SAT Subject Tests are more predictive when used in conjunction with HSGPA and SAT scores.

Test reliability

Reliability estimates range from 0.80 to 0.85, exceeding industry standards.

Alignment to high school science courses

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* Caltech, where the academic emphasis is on STEM fields, is critical for us to require and evaluate certain SAT Subject Tests in each of its subjects in a stronger sense of a student’s true passion and strength in these subject areas. We select candidates from a talented pool of applicants, and SAT Subject Tests help us to better understand a student’s preparation for our demanding curriculum.

Jarrid Whitney, Executive Director of Admissions and Financial Aid, California Institute of Technology.


For information, visit www.collegeboard.org/SSS or www.collegeboard.org/EPS.


About the SAT Subject Tests

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SAT Subject Tests are offered six times a year in nearly 7,000 test centers in more than 170 countries. Fee waivers are available for students to take up to six SAT Subject Tests, increasing access for all students.

SAT Subject Tests continue to evolve, maintaining their vital role in the college-going process with new research studies, test and student experience enhancements and updates of student practice tools.

SAT Subject Tests Offered

SAT Subject Tests in nonlanguage subjects assess a student’s comprehension of fundamental concepts, their content knowledge, and their ability to apply that knowledge to solve routine and nonroutine problems.

SAT Subject Tests in languages assess a student’s understanding of the language and ability to communicate in that language in a variety of cultural contexts. When there is a listening component on the test, the skills assessed include reading comprehension, language usage and listening comprehension.

Rigorous Test Development

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