

# ACT/SAT SEMINAR

Everything you didn't want  
to know about preparing for  
the tests...

# GENERAL INFORMATION

- ACT lets the student decide what set of scores they want sent to colleges. The SAT sends scores of every testing attempt.
- The ACT has up to 5 components: English, Mathematics, Reading, Science, and an optional Writing Test. The SAT has 3 components: Verbal, Mathematics, and a required Writing Test. Mathematics makes up 50% of SAT's test score and 25% of ACT's test score.
- Some students take the ACT and/or SAT as middle schoolers for practice or as part of the
- You may guess on the ACT because any answer is better than no answer, but wrong answers mean minus points on the SAT, so don't make wild guesses!
- Prepping for the ACT or SAT could/should include websites, prep classes like this, books, taking higher level classes in school, and READ--READ--READ!

# THE ACT ASSESSMENT— WHAT IS IT?

- A national college admission examination that consists of tests in:
  - *English, Mathematics, Reading, Science*
- ACT results are accepted by virtually all U.S. colleges and universities.
- The ACT includes 215 multiple-choice questions and takes approximately 3 hours and 30 minutes to complete with breaks. The actual testing time is 2 hours and 55 minutes (plus 30 minutes if you are taking the Writing Test).
- In the U.S., the ACT is administered on five national test dates, in October, December, February, April, and June. In selected states, the ACT is also offered in late September (not in Michigan).
- The ACT offers an optional Writing Test. You should check directly with the institutions you are considering to find out their requirements. Both MSU, U of M and Kalamazoo College will require the Writing Test for applicants entering college in the fall of 2006. LSSU, Northwood, Albion, Central and Alma recommend taking the Writing Test, though it is not

# HOW MUCH DOES THE ACT COST?

- The 2005-2006 basic registration fee is \$29.00 which includes score reports for you, your high school and up to four college choices for which a valid code is listed at time of registration.
- If you can't afford the registration fee, go to the following website to apply for a fee waiver:  
<http://www.actstudent.org/faq/answers/feewaiver.html>

# HOW OFTEN CAN I TAKE THE ACT ASSESSMENT?

- As often as you wish— many students test twice, once as a junior and again as a senior.
- You can test only once per national or state test date.
- You should definitely consider retesting if:
  - you had any problems during the test, such as misunderstanding the directions or not feeling physically well
  - you are not satisfied that your scores accurately represent your abilities in the areas tested

# HOW WILL I DO ON A RETEST?

- **ACT research shows that of the students who took the ACT more than once:**
  - 55% increased their composite score on the retest
  - 22% had no change in their composite score on the retest
  - 23% decreased their composite score on the retest
- **If you take the test more than once, click on the following link to determine how to send the scores from one testing date to the colleges of your choice:**  
<http://www.actstudent.org/faq/answers/moreth>

# TRY A SAMPLE ACT TEST:

- <http://www.4tests.com/exams/examdetail.asp?eid=13>
- <http://www.actstudent.org/sampletest/index.html>

# ONLINE ACT RESOURCES

- <http://www.number2.com/exams/act/index.cfm?s=0> (you can enroll at this site and receive resources and preparation online for FREE)
- <http://www.powerprep.com/getstarted.htm> (you can register for FREE online ACT/SAT preparation courses)
- <http://www.act-sat-prep.com/> (you must pay for this site)

# THE SAT

- Each section of the SAT is scored on a scale of 200—800, with two writing subscores for multiple-choice and the essay.
- The SAT includes a Critical Reading, Math, and Writing section, with a specific number of questions related to content.

## Writing: 50 minutes

- Grammar, usage, and word choice
- Multiple choice questions (35 min.) and student-written essay (25 min.)
- 200-800 score

## Critical Reading: 70 minutes

(two 25-min. sections and one 20-min. section)

- Critical reading and sentence-level reading
- Reading comprehension, sentence completions, and paragraph-length critical reading
- 200-800 score

## Math: 70 minutes

(two 25-min. sections and one 20-min. section)

- Number and operations; algebra and functions; geometry; statistics, probability, and data analysis
- Five-choice multiple-choice questions and student-produced responses
- 200-800 score

# THE SAT

## WRITING SECTION

**Length:** 60 minutes    **Score:** 200-800

**Content:** Grammar, Usage, Word Choice

**Item Types:** Multiple-Choice Questions (35 minutes); Student-Written Essay (25 minutes)

### The **SHORT ESSAY** measures your ability to:

- Organize and express ideas clearly
  - Develop and support the main idea
  - Use appropriate word choice and sentence structure
- You will be asked to develop a point of view on an issue, using reasoning and evidence, based on your own experiences, readings, or observations, to support your ideas.
  - The essay will be scored by trained high school and college teachers. Each reader will give the essay a score from ONE to SIX (SIX is the highest score) based on the overall quality of the essay and your demonstration of writing competence.

### The **MULTIPLE-CHOICE** writing questions measure your ability to:

- Improve sentences and paragraphs
- Identify errors (such as diction, grammar, sentence construction, subject-verb agreement, proper word usage and wordiness)

# THE SAT

## CRITICAL READING SECTION

**Length:** 70 minutes (Two 25-minute sections, one 20-minute section) **Score:** 200-800

**Content:** Critical reading and sentence-level reading

**Item Types:** Reading Comprehension, Sentence Completions, and Paragraph-Length Critical Reading

- The Critical Reading Section, formerly known as the Verbal Section, includes short reading passages along with the existing long reading passages. Analogies have been eliminated, but sentence-completion questions and passage-based reading questions remain.
  - **Sentence Completion questions measure your:**
    - knowledge of the meanings of words
    - ability to understand how the different parts of a sentence fit logically together
  - **The reading questions on the SAT** measure a student's ability to read and think carefully about several different passages ranging in length from about 100 to about 850 words. Passages are taken from a variety of fields, including the humanities, social studies, natural sciences, and literary fiction. They vary in style and can include narrative, argumentative, and expository elements. Some selections consist of a pair of related passages on a shared issue or theme that you are asked to compare and contrast. Such material can be followed by two to five questions that measure the same kinds of reading skills as are measured by the questions following longer passages. The following kinds of questions may be asked about a passage:
    - **Vocabulary in Context:** These questions ask you to determine the meanings of words from their context in the reading passage.
    - **Literal Comprehension:** These questions assess your understanding of significant information directly stated in the passage.
    - **Extended Reasoning:** These questions measure your ability to synthesize and analyze information as well as to evaluate the assumptions made and the techniques used by the author. Most of the reading questions fall into this category. You may be asked to identify cause and effect, make inferences, recognize a main idea or an author's tone,

# CRITICAL READING EXAMPLE

The passage below is followed by a question based on its content; questions following a pair of related passages may also be based on the relationship between the paired passages. Answer the questions on the basis of what is stated or implied in the passages and in any introductory material that may be provided.

The question below is based on the following passage.

Line 5 "The rock was still wet. The animal was glistening, like it was still swimming," recalls Hou Xianguang. Hou discovered the unusual fossil while surveying rocks as a paleontology graduate student in 1984, near the Chinese town of Chengjiang. "My teachers always talked about the Burgess Shale animals. It looked like one of them. My hands began to shake."  
Line 10 Hou had indeed found a Naraoia like those from Canada. However, Hou's animal was 15 million years  
Line 15 older than its Canadian relatives.

1. In line 5, "surveying" most nearly means

- (A) calculating the value of
- (B) examining comprehensively
- (C) determining the boundaries of
- (D) polling randomly
- (E) conducting a statistical study of

Explanation

The word "surveying" has a number of meanings, several of which are included in the choices above. In the context of this passage, however, only (B) makes sense. A student in the field of "paleontology" is one who studies prehistoric life as recorded in fossil remains. One of the activities of such a student would be to examine rocks carefully and "comprehensively" while looking for fossils.

•(A), (C), and (E) are incorrect because someone who studies fossils would not calculate the "value" of rocks, or determine the "boundaries" of rocks, or conduct a "statistical study" of rocks.

•(D) is wrong because "polling" rocks makes no sense at all.

**Correct answer: (B)**

Check out more questions online:

[http://www.collegeboard.com/student/testing/sat/prepare/passage\\_based/pracStart.html](http://www.collegeboard.com/student/testing/sat/prepare/passage_based/pracStart.html)

# THE SAT

## MATHEMATICS SECTION

**Length:** 70 minutes (Two 25-minute sections, one 20-minute section) **Score:** 200-800

**Content:** Number and operations; algebra and functions; geometry; statistics, probability, and data analysis

**Item Types:** Five-choice multiple-choice questions and student-produced responses

**Strategy:** For math questions without answer choices (grid answers), fill in your best guess; no points are subtracted for wrong answers as they are in all other question types.

- The SAT includes expanded math topics, such as exponential growth, absolute value, and functional notation, and place greater emphasis on such other topics as linear functions, manipulations with exponents, and properties of tangent lines.
- Important skills formerly measured in the quantitative comparison format, such as estimation and number sense, will continue to be measured through the multiple choice and student response (grid-in) questions.
- **Can I use a calculator?**
  - Yes. Students can continue to use a four-function, scientific, or graphing calculator. The College Board recommends that students use a calculator at least at the scientific level for the SAT, although it's still possible to solve every question without a calculator.

# THE SAT

## MATHEMATICS SECTION

### Number & Operations :

#### ■ Sequences Involving Exponential Growth

- The SAT includes mathematics questions that require knowledge of exponential growth sequences, also called geometric sequences. In a geometric sequence, there is a constant ratio between consecutive terms. For example, 7, 21, 63, 189, ... is a geometric sequence that has constant ratio 3 and begins with the term 7. The term obtained after multiplying  $n$  times by 3 is  $7 \times 3^n$ . Since these sequences have real-life applications, questions in this area might be presented in contexts such as population growth. One example might be that of a population that initially numbers 100 and grows by doubling every eight years. The expression  $100 \times 2^{t/8}$  would give the population  $t$  years after it begins to grow.

#### ■ Sets (Union, Intersection, Elements)

- If a set is a collection of things, then the "things" can be referred to as "elements" or "members" of the set. Questions on the SAT might ask about the union of two sets (i.e., the set consisting of elements that are in either set or both sets) or the intersection of two sets (i.e., the set of common elements). For example, if set X is the set of positive even integers and set Y is the set of positive odd integers, a question might ask students to recognize that the union of the two sets is the set of all positive integers.

# THE SAT

## MATHEMATICS SECTION

### Algebra & Functions:

- Absolute Value
  - Rational Equations and Inequalities
  - Radical Equations
  - Integer and Rational Exponents
  - Direct and Inverse Variation
  - Function Notation
  - Concepts of Domain and Range
  - Functions as Models
  - Linear Functions -- Equations and Graphs
  - Quadratic Functions -- Equations and Graphs
- For more detailed information and examples of questions in each of these content areas, go to the following website:  
<http://www.collegeboard.com/student/testing/sat/about/sat/functions.html>

# THE SAT

## MATHEMATICS SECTION

### Geometry & Measurement:

- **Geometric Notation for Length, Segments, Lines, Rays, and Congruence**
  - The SAT will use the geometric notation commonly found in high school textbooks.
- **Problems in Which Trigonometry May Be Used as an Alternative Method of Solution**
  - The SAT will include more questions that rely on the special properties of 30-60-90 triangles or 45-45-90 triangles. These questions can be answered by using trigonometric methods, but may also be answered using other methods.
- **Properties of Tangent Lines**
  - Questions on the SAT may require knowledge of the property that a line tangent to a circle is perpendicular to a radius drawn to the point of tangency.
- **Coordinate Geometry**
  - Some questions on the SAT may require knowledge of the properties of the slopes of parallel or perpendicular lines. In addition, some questions may require students to find the equations of lines, the midpoints of line segments, or the distance between two points in the coordinate plane.
- **Qualitative Behavior of Graphs and Functions**
  - A question on the SAT might show the graph of a function in the  $xy$ -coordinate plane, and ask students to give, for the portion of the graph shown, the number of values of  $x$  for which  $f(x) = 3$ .
- **Transformations and Their Effect on Graphs of Functions**
  - The SAT will include questions that ask students to determine the effect of simple transformations on graphs of functions. For example, the graph of a function  $f(x)$  could be given and students would be asked questions about the graph of the function  $f(x + 2)$ .
- **For more detailed information and examples of questions in each of these content areas, go to the following website: <http://www.collegeboard.com/student/testing/sat/about/sat/geometry.html>**

# THE SAT

## MATHEMATICS SECTION

### Data Analysis, Statistics, & Probability:

#### ■ Data Interpretation, Scatterplots, and Matrices

- A question on the SAT might ask about the line of best fit for a scatterplot. Students would be expected to identify the general characteristics of the line of best fit by looking at the scatterplot. For example, students might determine that this line has a slope that is positive but less than 1. Students would not be expected to use formal methods of finding the equation of the line of best fit. Students will also be expected to be able to interpret data displayed in tables, charts, and graphs.

#### ■ Geometric Probability

- Some questions on the SAT may involve geometric probability. For example, if a point is to be chosen at random from the interior of a region, part of which is shaded, students might be asked to find the probability that the point chosen will be from the shaded portion of the region. These questions could be presented in a context such as throwing darts at a target.

- For more detailed information and examples of questions in each of these content areas, go to the following website:

<http://www.collegeboard.com/student/testing/sat/about/sat/statistics.html>

# WHAT ARE SAT SUBJECT TESTS?

- Subject Tests, one-hour, mostly multiple-choice tests, measure how much students know about a particular academic subject and how well they can apply that knowledge.
- The 20 Subject Tests include: Literature, U.S. History, World History, Math Level IC, Math Level IIC, Biology E/M, Chemistry, Physics, French Reading, French Reading with Listening, German Reading, German Reading with Listening, Spanish Reading, Spanish Reading with Listening, Modern Hebrew Reading, Italian Reading, Latin Reading with Listening, Japanese Reading with Listening, Korean Reading with Listening, and Chinese Reading with Listening.
- Many colleges require or recommend one or more of the Subject Tests for admission or placement. Used in combination with other background information (your high school record, scores from other tests like the SAT I, teacher recommendations, etc.), they provide a dependable measure of your academic achievement and are a good predictor of future performance.
- Check out this link for more information:  
<http://www.collegeboard.com/student/testing/sat/about/SATII.html>

# TRY A SAMPLE SAT TEST:

- <http://www.4tests.com/exams/examdetail.asp?eid=6>
- [http://www.kaptest.com/Kaplan/Article/College/SAT/Practice-SAT-PSAT/CO\\_sat\\_satqbankol.html;jsessionid=Z3VV1XTB2X3WPLA3AQJXBM3MDUCBE2HC](http://www.kaptest.com/Kaplan/Article/College/SAT/Practice-SAT-PSAT/CO_sat_satqbankol.html;jsessionid=Z3VV1XTB2X3WPLA3AQJXBM3MDUCBE2HC)
- <http://www.syvum.com/sat/>

# ONLINE SAT RESOURCES

- [http://www.collegeboard.com/student/testing/sat/prep\\_online/prep\\_one.html](http://www.collegeboard.com/student/testing/sat/prep_online/prep_one.html) (test prep items, practice questions, test-taking tips, full practice test)
- <http://www.powerprep.com/getstarted.htm> (you can register for FREE online ACT/SAT preparation courses)
- <http://www.number2.com/exams/sat/index.cfm?s=0> (you can enroll at this site and receive resources and preparation online for FREE)
- <http://www.act-sat-prep.com/> (this costs money to join)
- [http://www.takesat.com/verbal\\_main.php?PHPSESSID=0adde5a6db6afc5e3955a7b7b5fddbe1](http://www.takesat.com/verbal_main.php?PHPSESSID=0adde5a6db6afc5e3955a7b7b5fddbe1) (FREE test prep items, practice questions, test-taking tips, additional resources)

# WHAT IS THE PSAT?

- The Preliminary SAT<sup>®</sup>/National Merit Scholarship Qualifying Test is a co-sponsored program by the College Board and National Merit Scholarship Corporation (NMSC).
- PSAT/NMSQT stands for Preliminary SAT/National Merit Scholarship Qualifying Test. It's a standardized test that provides firsthand practice for the SAT Reasoning Test<sup>™</sup>. It also gives you a chance to enter National Merit Scholarship Corporation (NMSC) scholarship programs.
- The PSAT/NMSQT measures:
  - critical reading skills
  - math problem-solving skills
  - writing skills

# WHY TAKE THE PSAT?

- To receive feedback on your strengths and weaknesses on skills necessary for college study. You can then focus your preparation on those areas that could most benefit from additional study or practice.
- To see how your performance on an admissions test might compare with that of others applying to college.
- To enter the competition for scholarships from the National Merit Scholarship Corporation (grade 11).
- To help prepare for the SAT. You can become familiar with the kinds of questions and the exact directions you will see on the SAT.
- To receive information from colleges when you check "yes" to Student Search Service.
- **You should definitely take the PSAT/NMSQT in your junior year.** Many students benefit from also taking it earlier, typically in their sophomore year. If you take it earlier, recognize that the PSAT/NMSQT is a junior-level test, so don't get discouraged if your score is low. Your score will usually increase as your years of study increase.

# HOW DO I SIGN UP?

- To sign up online, go to the following websites:
  - **ACT:** <http://www.actstudent.org/index.html>
  - **SAT:**  
<http://www.collegeboard.com/student/testing/sat/reg.html>
  - **PSAT:** You cannot sign up for the PSAT online. You must check with your high school counselor or principal for registration materials.

# LAST BUT CERTAINLY NOT LEAST...

- Get a full night of sleep before the test.
- Eat breakfast and make sure you are well hydrated. Bring a water bottle for the test.
- Bring plenty of sharpened No. 2 pencils.
- Bring a watch and calculator for the test.
- Go to the bathroom right before the test!
- RELAX and BREATHE!!!!!!!!!!!!!!!!!!!!!!