

# Barron's

原版  
引进

# 巴朗 SAT II 生物 E/M

Subject Test  
Biology E/M  
(第3版)

[美] 戈德堡 (Goldberg, D.T.) 编著

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# Barron's 巴朗 SAT II

# 生物<sub>E/M</sub>

**Subject Test Biology E/M (第3版)**

[美] 戈德堡 (Goldberg, D.T.) 编著

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# Why Should I Buy This Book?

## 我为什么要买这本书

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**T**his book includes:

- Extensive subject reviews of every topic required for the Biology SAT, including the most current information about the three-domain system of taxonomy
- One mini-diagnostic test that identifies your strengths and weaknesses
- Two full-length practice tests with questions that mimic the actual SAT Biology test
- Instructions that enable you to calculate your 200 to 800 SAT score
- Over 400 additional practice questions in the subject reviews

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WHAT YOU NEED TO KNOW  
ABOUT THE SAT SUBJECT TEST:  
BIOLOGY E/M

**关于SAT II 生物 E/M,  
你需要知道什么?**

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# The Basics 第一章 基础知识

CHAPTER

1

- Purpose of the Biology Subject Test
- Test format
- When to take the test
- How the test is scored

## WHAT IS THE PURPOSE OF THE TEST? 考试考查什么?

**T**he Biology Subject Test measures your knowledge after completing a general college-preparatory high school Biology course. It is independent of any particular textbook or biology course you may have taken. SAT subject tests are required by many colleges you may decide to apply to.

The SAT Subject Tests fall into five subject areas:

**TABLE 1.1**

**SAT Subject Tests**

Subject Area	Test Title
English	Literature
History and Social Studies	US History World History
Mathematics	Math Level 1 Math Level 2
Science	Biology E/M Chemistry Physics
Languages	Chinese with Listening French French with Listening German German with Listening Italian Japanese with Listening Korean with Listening Latin Modern Hebrew Spanish Spanish with Listening

## WHEN DO I TAKE THE TEST? 何时参加考试?

Take the test right after the course ends, when the content is still fresh in your mind. That would be in May or June for most of you. Tests are given in October, November, December, January, May, and June.

## HOW DO I REGISTER FOR THE TEST? 如何报名?

You may register by using registration forms found inside the *SAT Registration Bulletin* that is available from your high school Guidance Office. You can also register for the SAT Subject Test online by visiting the College Board's web site at [www.collegeboard.com](http://www.collegeboard.com).

When you register, you will have to indicate which specific subject tests you plan to take. **You may take one, two, or three on any given testing date.** Your testing fee will vary accordingly.

You may change your mind on the day of the test and select any test offered and available that day, except for the Language Test with Listening, for which you must preregister.

## WHAT IS THE FORMAT OF THE TEST? 什么样的考试形式?

The Biology E/M Test has two parts: 60 core questions followed by 20 questions in either specialized section—ecology (E) or molecular (M). Every student answers 80 questions—60 core questions plus 20 special section questions. You choose the area in biology for which you feel most prepared.

There are 5 major content areas on the test. Both tests include questions on all 5 topics. However, the E test has more questions about ecology, while the M test has more questions about molecular and cell biology.

The skills and knowledge that you will be tested on include:

- 1. Recall.** Knowledge of facts and terminology
- 2. Application.** Understanding concepts, applying knowledge to practical situations, and solving problems
- 3. Interpretation.** Integrating information to form conclusions

The metric system is used on this test.

## WHICH TEST SHOULD I TAKE? 我应该参加哪种考试?

If you feel more comfortable answering questions about populations and community systems, and interpreting data about ecosystems, choose the Biology-E exam. If you feel that you would do better answering questions about cell structure and interpreting data about enzymes and other molecules, take the Biology-M test. If you are unsure about which one you should take, discuss it with your biology teacher.

*You may decide on the day of the test which test you will take.* Because the two tests contain common core questions, you may not take both exams on the same day. You must pencil in the appropriate grid for the test you wish, either Biology-E or Biology-M.

Table 1.2 lists the topics covered on each test. It also indicates the percentage of each topic on the E (ecology) and M (molecular) tests.

**TABLE 1.2**

### Comparison of Biology-E and Biology-M

Core Topics	Approximate Percent of E Test	Approximate Percent of M Test
<b>Cell and molecular biology</b> Cell structure and organization, mitosis, photosynthesis, cell respiration, enzymes, molecular inheritance, and biochemistry	15	27
<b>Ecology</b> Energy flow and nutrient cycles, populations and communities, ecosystems and biomes	23	13
<b>Classical genetics</b> Meiosis, Mendelian genetics, inheritance patterns	15	20
<b>Organismal biology</b> Structure, function, and development of organisms with emphasis on plants and animals; animal behavior	25	25
<b>Evolution and diversity</b> Origin of life, evidence of evolution, natural selection, patterns of evolution, taxonomy (classification)	22	15

**HOW IS THE TEST SCORED? 考试的评分标准是什么?**

The test is scored on a scale of 200 to 800. You earn one point for each correct answer. You lose  $\frac{1}{4}$  of a point for each wrong answer. Questions you omit are simply not counted and neither are questions for which you mark more than one answer.

*You are penalized more for a wrong answer than you are for leaving an answer blank.* Your raw score is converted to a scaled score that is reported to you and to any colleges you specify.

After each practice test in this book, you will be directed to grade your own test the same way that the College Board will grade your test.

**WHAT IS A GOOD SCORE? 怎么才算是好的成绩?**

A score of 800 is fabulous, and a 750 is great. However, earning a great score will not necessarily ensure that you get into the college of your dreams. On the other hand, scoring a 600 does not necessarily mean that you will be barred from your favorite school. Many factors go into college admissions. The SAT Subject Test is simply one factor.



- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>• Familiarize yourself with the test format</li><li>• Types of questions to expect</li></ul> | <ul style="list-style-type: none"><li>• Pay attention</li><li>• Watch the clock</li><li>• Tips on guessing</li></ul> |
|--|--|

Using this book will help you prepare for the SAT Subject Test: Biology E/M. However, do not expect to open up this book for the first time on the night before the test and reap any benefits. Instead, you should use this book for several months and do the following:

1. Familiarize yourself with the directions for the SAT Subject Test.
2. Familiarize yourself with the SAT Subject Test answer sheet.
3. Take the mini-diagnostic test in this book.
4. Study all review chapters in this book and answer all the multiple-choice questions at the end of each chapter, concentrating on your weakest areas.
5. Take the first practice test in this book in a quiet room. Do it **in one sitting**. Do not allow for any distractions. **Do not take any phone calls. Do not talk to anyone. Do not listen to music.**
6. Time yourself. Keep an eye on the time and notice how much time has passed when you are halfway through the test. Assess if you need to speed up or slow down. The real SAT Subject Test is 1 hour long, so your practice test should also take exactly 1 hour.

Many students have told me that they found that they were much more nervous during the actual test than when they took the practice test at home. When I asked them under what conditions they took the practice test, they said, "I was listening to some music and took a break in the middle." **Wrong! Wrong! Wrong!** You must mimic the test conditions *exactly* when you practice, or you will not do as well as you could on the test.

7. When you are finished, calculate your grade according to the detailed instructions.