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● Mark Anestis 编著

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前言

AP项目（Advanced Placement Program）始于1955年，由美国大学理事会（the College Board）主持，是在高中阶段开设的具有大学水平的课程，即大学预修课程。AP项目目前设有34门课程和考试，它可以使有余力、有能力、成绩优秀的高中生有机会先修部分美国大学基础课程以获得大学学分，因此吸引了很多成绩优秀的学生选修。目前，已有60多个国家的几千所大学把AP学分作为其入学参考标准，其中包括哈佛大学、耶鲁大学、牛津大学、剑桥大学等世界知名大学。

美国每年约有200万高中毕业生，他们都要参加美国高考SAT和AP课程的考试。美国高中生会在11年级时完成SAT考试，在12年级（高中最后一年）完成两件大事：第一，根据SAT的考试成绩申请大学和奖学金；第二，选修AP课程，并进行备考。在高中选修AP课程和通过AP考试不仅是对学生能力和学业水平的证明，还可以使学生：1. 在申请大学时具有很大的优势。美国大学把学生在AP考试中的表现作为衡量其是否能够胜任大学学习的依据。从美国大学录取顾问委员会公布的影响大学录取因素的比较分析可以看出，AP成绩以80.3%的影响力位居第一，因为它向学校充分展示了学生的才智、专长及学习能力。2. 进入大学后，可以获得大学学分，免修同类课程，提早选修更高级的课程或跳级。3. 提前毕业。4. 节省大学学费。在美国，初等教育是免费的，但高等教育是收费的。选修的AP课程越多，免修的大学课程也就越多，节省的学费也就越多。另外，对中国学生而言，除了可以获得美国大学学分、省时省钱外，还可以在国内提前适应美国大学课程。

AP考试成绩的评定为5分制，满分5分表示极为优秀，4分为优秀，3分相当于合格，即可为大多数学校所接受，2分为可能有资格，1分则不予推荐。AP考试在每年5月份举行一次，为期两周。每门课程的考试时间约为2~3个小时，考试费用为每科1000元人民币或1400元港币左右。

更多信息可查询以下网站：

AP考试官网：<http://www.collegeboard.com>

AP国内报名网站：<http://apchina.net.cn>

香港考务局报名网址：<https://www2.hkeaa.edu.hk>

为满足国内考生对AP考试资料日益增长的需求，我们从美国知名教育出版公司McGraw-Hill Education引进了本系列AP考试丛书，共包括7本，分别为《AP微观/宏观经济学5分制胜》、《AP统计学5分制胜》、《AP微积分5分制胜》、《AP美国历史5分制胜》、《AP物理5分制胜》、《AP生

物5分制胜》和《AP化学5分制胜》。AP各学科分册由AP考试相关领域专家编写，精准把握考试命题特点，设计“五步”高效学习方案，总结与考试相关的学科内容和要点，精选针对性练习以及全真模拟试题，并配以答案和准确详尽的解析。本系列丛书适用于备考AP的所有考生，便于考生巩固所学，紧抓重点，取得高分。

本书为其中的《AP生物5分制胜》。你可能会从中发现一些乐趣，如果你认真对待，应该能学到不少知识。书中不仅涵盖了AP生物的主要概念和内容，而且本书的编写方式会让你感到愉悦。

市面上的许多参考书与本书的内容相差无几。不过，作者以稍稍不同的方式来处理本书中的内容——尽可能使书中的语言像日常对话一样生动形象且易于理解。作者也曾经备战过许多标准化考试，因此深知没有什么比一本让人昏昏欲睡的参考书更烦人的了。在本书的编写过程中，作者与154,076名参加过AP考试的考生进行了交流，询问他们是如何备考的，哪些学习技巧对他们最有帮助，哪些内容对考试成功最为关键。书中记录了部分考生的评论和建议，要重视这些内容，因为过来人的建议可能对你更有帮助。

准备AP考试必然有很多内容要学习，现在就利用本书让自己更加轻松地备考吧。先根据书中第1步（Step 1）中的内容来设定你的学习计划。再进行第2步（Step 2）中的诊断测试，对照答案并阅读解析，在备考之前对自己进行定位。然后领会第3步（Step 3）中的建议和策略，这可以帮助你最终掌握第4步（Step 4）中的全部知识内容。把第5步（Step 5）中的两套模拟测试当做真实考试，检测你对书中内容的理解和掌握程度。一定要尝试着回答第5步（Step 5）中的模拟开放性试题（free-response tests）。要习惯问答题这种形式。它们占总分的40%，不能被忽视。最后，建议你在开始认真学习之前静下心来，放轻松，并为自己找一个舒服的座位。在考前有很多内容需要学习，享受这个过程吧！

INTRODUCTION: THE FIVE-STEP PROGRAM

Welcome!

If you focus on the beginning, the rest will fall into place. When you purchase this book and decide to work your way through it, you are beginning your journey to the Advanced Placement (AP) Biology exam. I will be with you every step of the way.

Why This Book?

I believe that this book has something unique to offer you. I have spoken with many AP Biology teachers and students and have been fortunate to learn quite a bit from these students about what they want from a test-prep book. Therefore, the contents of this book reflect genuine student concerns and needs. This is a student-oriented book. I did not attempt to impress you with arrogant language, mislead you with inaccurate information and tasks, or lull you into a false sense of confidence through ingenious shortcuts. I have not put information into this book simply because it is included in other review books. I recognize the fact that there is only so much that one individual can learn for an exam. Believe me, I have taken my fair share of these tests—I know how much work they can be. This book represents a realistic approach to studying for the AP exam. I have included very little heavy technical detail in this book. (There *is* some . . . I had to . . . but there is not very much.)

Think of this text as a resource and guide to accompany you on your AP Biology journey throughout the year. This book is designed to serve many purposes. It should:

- Clarify requirements for the AP Biology exam.
- Provide you with test practice.
- Help you pace yourself.
- Function as a wonderful paperweight when the exam is completed.
- Make you aware of the Five Steps to Mastering the AP Biology Exam.

Organization of the Book

I know that your primary concern is to learn about the AP Biology exam. I start by introducing the five-step plan. I then give an overview of the exam in general. I follow that up with three different approaches to exam preparation and then move on to describe some tips and suggestions for how to approach the various sections of the exam. The Diagnostic Exam should give you an idea of where you stand before you begin your preparations. I recommend that you spend 45 minutes on this practice exam.

The volume of material covered in AP Biology is quite intimidating. Step 4 of this book provides a comprehensive review of all the major sections you may or may not have covered in the classroom. Not every AP Biology class in the country will get through the same amount of material. This book should help you fill any gaps in your understanding of the coursework.

Step 5 of this book is the practice exam section. Here is where you put your skills to the test. The multiple-choice questions provide practice with typical types of questions asked in past AP exams. Keep in mind that they are *not* exact questions taken directly from past exams. Rather, they are designed to focus you in on the key topics that often appear on the actual AP Biology exam. When you answer a question I've written in this book, do not think to yourself, "OK . . . that's a past exam question." Instead, you should think to yourself "OK, Mark [that would be me] thought that was important, so I should remember this fact. It may show up in some form on the real exam." The essay questions are designed to cover the techniques and terms required by the AP exam. After taking each exam, you can check yourself against the explanations of every multiple-choice question and the grading guidelines for the essays.

The Appendix is also important. It contains a bibliography of sources that may be helpful to you, a list of Websites related to the AP Biology exam, and a glossary of the key terms discussed in this book.

Introducing The Five-Step Program

The five-step program is designed to provide you with the skills and strategies vital to the exam and the practice that can help lead you to that perfect score of 5. Each step is designed to provide you with the opportunity to get closer and closer to the "Holy Grail" 5.

Step 1: Set Up Your Study Program

Step 1 leads you through a brief process to help determine which type of exam preparation you want to commit yourself to:

1. Full-year prep: September through May
2. One-semester prep: January through May
3. Six-week prep: the 6 weeks prior to the exam

Step 2: Determine Your Test Readiness

Step 2 consists of a diagnostic exam, which will give you an idea of what you already know and what you need to learn between now and the exam. Take the test, which is broken down by topic, look over the detailed explanations, and start learning!

Step 3: Develop Strategies for Success

Step 3 gives you strategy advice for the AP Biology exam. It teaches you about the multiple-choice questions you will encounter and the free-response questions you will face on exam day.

Step 4: Review the Knowledge You Need to Score High

Step 4 is a big one. This is the comprehensive review of all the topics on the AP exam. You've probably been in an AP Bio class all year, and you've likely spent hours upon hours reading through the AP Biology textbooks. These review chapters are appropriate both for quick skimming (to remind yourself of salient points that may have slipped your mind) and for in-depth study (to teach yourself broader concepts that may be new to you.)

Step 5: Build Your Test-Taking Confidence

Ahhhh the full-length practice tests—oh the joy!! This book has two of them. If you purchased the version of this book with a CD, you find three more practice tests on the CD.

One of the most effective ways to improve as you prepare for any exam is to take as many practice tests as you can. Sit down and take these tests fully timed, see what you get wrong, and learn from those mistakes. There are also four full sets of free-response questions. Take advantage of these and learn the skills necessary to dominate the essay portion of the AP Bio exam. Remember . . . it's good to make mistakes on these exams because if you learn from those mistakes now, you won't make them again in May! ☺

The Graphics Used in This Book

To emphasize particular skills and strategies, we use several icons through this book. An icon in the margin will alert you that you should pay particular attention to the accompanying text. We use three icons:



1. This icon points out a very important concept or fact that you should not pass over.



2. This icon calls your attention a problem-solving strategy that you may want to try.



3. This icon indicates a tip that you might find useful.

Boldfaced words indicate terms that are included in the glossary at the end of the book. Boldface is also used to indicate the answer to a sample problem discussed in the test. Throughout the book you will find marginal notes, boxes, and starred areas. Pay close attention to these areas because they can provide tips, hints, strategies, and further explanations to help you reach your full potential.

ABOUT THE AUTHOR

MARK ANESTIS was born in Pittsburgh, Pennsylvania, and has lived in Connecticut since the age of 6. He graduated from Weston High School in Weston, Connecticut, in 1993 and attended Yale University. While taking science courses in preparation for medical school, he earned a bachelor's degree cum laude in economics. He attended the University of Connecticut School of Medicine for 2 years and passed the step 1 boards and then chose to redirect his energy toward educating students in a one-on-one environment. He is the founder and director of *The Learning Edge*, a tutoring company based in Hamden, Connecticut (www.thelearningedge.net). Since January 2000, he has been tutoring high school students in math, the sciences, and standardized test preparation (including the SAT, ACT, and SAT Subject Tests). In addition to this review book, he has co-authored *McGraw-Hill's SAT*, *McGraw-Hill's PSAT/NMSQT*, and *McGraw-Hill's 12 SAT Practice Tests and PSAT*. He lives with his wife and sons in Hamden, Connecticut.

The author also created the SAT Ladder app (www.satladder.com), which allows students to prepare for the SAT while competing against other students to see how high they can climb on the SAT Ladder. The app is available on the App Store.

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This project would not have been completed without the assistance of many dear friends and relatives. To my wife, Stephanie, your countless hours of reading, rereading, and reading once again were of amazing value. Thank you so much for putting in so much time and energy to my cause. You have helped make this book what it is. To my parents and brothers who likewise contributed by reading a few chapters when I needed a second opinion, I thank you. I would like to thank Chris Black, for helping me edit and clarify a few of the chapters. I would like to thank Don Reis, whose editing comments have strengthened both the content and the flow of this work. Finally, a big thank you to all the students and teachers who gave me their input and thoughts on what they thought important for this exam. They have made this book that much stronger. Thank you all.

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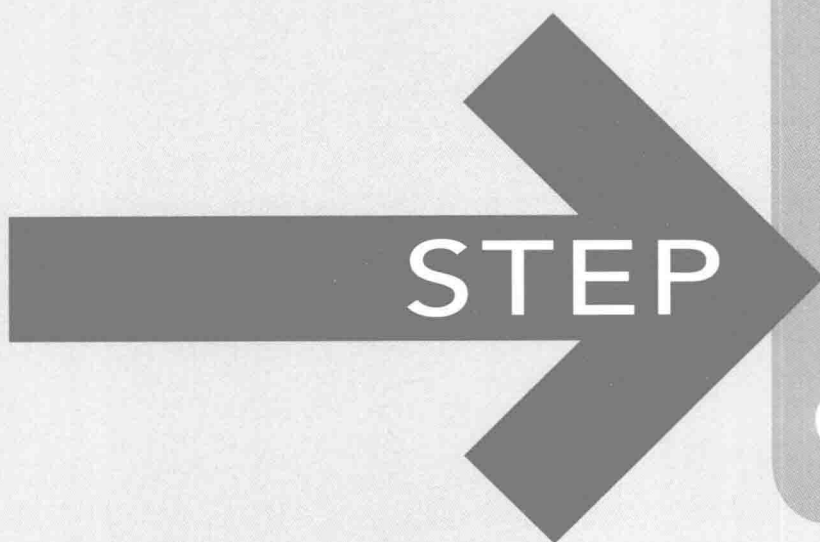
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Set Up Your Study Program

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