

**CLIFFS**

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# GED

## SCIENCE PREPARATION GUIDE

### THE SCIENCE TEST

The New High School Equivalency Examination

By Harold D. Nathan, Ph.D.

Series Editor: Jerry Bobrow, M.A.

Written by testing experts

New GED question types

Intensive science reviews

Two full-length practice tests

Complete answers and explanations

Glossaries of key terms

**Cliffs**  
NOTES<sup>INC.</sup>

CLIFFS

**GED Science Test**

**PREPARATION GUIDE**

The New High School  
Equivalency Examination

*by*  
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## PREFACE

We know that passing the GED Test Battery is important to you! And thorough preparation is the key to doing your best. Because of this, your study time must be used most effectively. With this purpose in mind, the Cliffs GED Test Preparation Series was developed by leading experts in the field of test preparation. These guides are the most comprehensive test preparation materials that you can realistically complete in a reasonable time. Each of the GED Guides is easy to use, direct, precise, and thorough, giving you the important information, tips, and strategies that you need to pass the GED. These strategies and techniques have been carefully tested and are presently used in test preparation programs at many leading universities and colleges.

This GED Guide is divided into five parts:

- PART I:** Introduction—a general description of the exam, recent format, questions commonly asked, and basic overall strategy.
- PART II:** Analysis of Exam Areas—focuses on ability tested, basic skills necessary, directions, analysis of directions, suggested approaches with samples, and additional tips.
- PART III:** Assessment—a half-length Mini-Test to assess your strengths and weaknesses.
- PART IV:** Subject Area Reviews—intensive reviews of the important areas (biology, geology, chemistry, and physics), including an introduction on how to review and a 500-word glossary.
- PART V:** Practice-Review-Analyze-Practice—two complete full-length practice tests with answers and *in-depth explanations*.

The Mini-Test and each practice test are followed by analysis charts and score approximators to assist you in evaluating your progress.

These guides are not meant to substitute for comprehensive courses, but if you follow the Study Guide Checklist and study regularly, you will get the best test preparation possible.

## STUDY GUIDE CHECKLIST

- \_\_\_ 1. Read the GED information materials available at your local GED center. Check minimum score, age, and residence requirements.
- \_\_\_ 2. Become familiar with the Test Format, page 3.
- \_\_\_ 3. Read the General Description and Questions Commonly Asked about the GED Test Battery, starting on page 3.
- \_\_\_ 4. Learn the techniques of A Systematic Overall Approach, page 6.
- \_\_\_ 5. Carefully read Part II, Analysis of Exam Areas, starting on page 9.
- \_\_\_ 6. Take the Mini-Test Assessment, starting on page 15.
- \_\_\_ 7. Check your answers and analyze your results, page 27.
- \_\_\_ 8. Fill out the Tally Sheet for Questions Missed to pinpoint your mistakes, page 30.
- \_\_\_ 9. Read How to Review, page 37.
- \_\_\_ 10. Review Biology (basic concepts), starting on page 38.
- \_\_\_ 11. Go over Glossary of Terms in Biology, starting on page 50.
- \_\_\_ 12. Review Geology (basic concepts), starting on page 57.
- \_\_\_ 13. Go over Glossary of Terms in Geology and Meteorology, starting on page 67.
- \_\_\_ 14. Review Chemistry (basic concepts), starting on page 72.
- \_\_\_ 15. Go over Glossary of Terms in Chemistry, starting on page 81.
- \_\_\_ 16. Review Physics (basic concepts), starting on page 86.
- \_\_\_ 17. Go over Glossary of Terms in Physics and Astronomy, starting on page 96.
- \_\_\_ 18. Strictly observing time allotments, take Practice Test 1, beginning on page 103.
- \_\_\_ 19. Check your answers and analyze your Practice Test 1 results, page 121.
- \_\_\_ 20. Fill out the Tally Sheet for Questions Missed to pinpoint your mistakes, page 124.
- \_\_\_ 21. While referring to each item of Practice Test 1, study ALL the Answers and Explanations that begin on page 125.
- \_\_\_ 22. Review weak areas as necessary.
- \_\_\_ 23. Strictly observing time allotments, take Practice Test 2, beginning on page 131.

- \_\_\_\_\_ 24. Check your answers and analyze your Practice Test 2 results, page 150.
- \_\_\_\_\_ 25. Fill out the Tally Sheet for Questions Missed to pinpoint your mistakes, page 153.
- \_\_\_\_\_ 26. While referring to each item of Practice Test 2, study ALL the Answers and Explanations that begin on page 154.
- \_\_\_\_\_ 27. Review weak areas.
- \_\_\_\_\_ 28. Review How to Take the Test, starting on page 9.
- \_\_\_\_\_ 29. Carefully read Final Preparation: "The Final Touches," page 161.

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## **PART I: Introduction**



## **FORMAT OF THE NEW GED SCIENCE TEST**

**Time: 90 Minutes**

**Total Questions: 60**

<b>Part A: Background Knowledge</b>	<b>20 Questions</b>
<b>Part B: Reading Comprehension</b>	<b>40 Questions</b>

## **CONTENT AREAS**

<b>1. Biology</b>	<b>50%</b>
<b>2. Geology</b>	<b>20%</b>
<b>3. Chemistry</b>	<b>15%</b>
<b>4. Physics</b>	<b>15%</b>

## **GENERAL DESCRIPTION**

The GED Science Test lasts 1½ hours (90 minutes) and consists entirely of multiple-choice questions. The test contains 60 questions that are of two basic types: general science knowledge (20 questions) and science reading comprehension (40 questions). The areas covered are biology, geology, chemistry, and physics, with biology comprising 50% of the exam and the physical sciences comprising the other 50%. The test is scored from 20 to 80 with all questions being of equal value.

## QUESTIONS COMMONLY ASKED ABOUT THE GED TEST BATTERY

**Q: Who administers the GED Test Battery?**

**A: The GED Test Battery is administered by the GED Testing Service of the American Council on Education (ACE). The test development was conducted by Educational Testing Service with the guidelines drawn up by experienced secondary school educators.**

**Q: When are the GEDs given?**

**A: The tests are administered nationwide on a continuous basis. You can get administration dates and test locations by contacting your local GED testing centers, high schools, or adult schools.**

**Q: Do I have to take the complete battery of tests at once?**

**A: No! You may take one, two, three, four, or all five of the tests on the same day.**

**Q: Can I take the GEDs more than once?**

**A: Yes! You may take any or all of the tests more than once. But remember, your plan is to pass on the *first* try.**

**Q: Are there any special editions of the GED?**

**A: Yes! In addition to the English version, the GED is also given in Spanish and French. There are also special large-print and/or tape-recorded editions for handicapped candidates.**

**Q: What is a passing score?**

**A: There are no national standards for the GEDs. Each state has established its own standards for passing the tests. In many cases you need only 40% correct to pass. The Appendix includes a chart to give you an indication of previous requirements. Each candidate should check the up-to-date policies in his or her specific state. It should be noted that some states require candidates to pass each test, while others require the average score of the tests to be passing.**

**Q: What grade level are the tests?**

**A: The tests are standardized to reflect the range of knowledge and ability of twelfth grade students who are certain to graduate.**

**Q: How are the *new* GEDs different from the *old* GEDs?**

**A: The new GED Test Battery was shortened from 10 hours to 6 hours with fewer questions in each test. The Social Studies and Science Tests now include general knowledge questions and shorter reading passages. The**

Writing Skills Test, formerly the Test on Correctness and Effectiveness of Expression, now includes logic (not formal logic) and organization questions. The Reading Skills Test now draws more information from modern literature and everyday reading. The Math Test is basically the same.

**Q: How should I prepare?**

**A: Understanding and practicing test-taking strategies will help a great deal, especially on the reading comprehension type questions. Subject matter reviews, by reviewing major concepts and important terminology, are invaluable. Both subject matter and strategies are covered in this book. Also, many states offer preparation programs to assist students. Check with your local high school, adult school, or occupational center for further information.**

**Q: Should I guess on the tests?**

**A: Yes! Since there is no penalty for guessing, GUESS if you have to. If possible, first try to eliminate some of the choices to increase your chances of choosing the right answer.**

**Q: How and when should I register and where can I get more information?**

**A: This information is available from your local GED Testing Center, or write to General Educational Development, GED Testing Service of the American Council on Education, One Dupont Circle, Washington, D.C., 20036.**

## A SYSTEMATIC OVERALL APPROACH

Many who take the GED don't get the scores that they deserve because they waste time on hard questions, leaving insufficient time to answer the easy questions. Don't let that happen to you. Use the following system to mark your answer sheet:

1. Answer easy questions immediately.
2. Mark a "+" next to the number of any question that seems solvable but very difficult. Go on to the next question.
3. Mark a "-" next to any question that seems impossible. Go on to the next question.

The strategy is to defer difficult and impossible questions. Act quickly. Don't waste time deciding whether a question is a "+" or a "-."

Your answer sheet should look something like this after you finish answering your easy questions:

1. ① ② ● ④ ⑤  
2. ● ② ③ ④ ⑤  
+3. ① ② ③ ④ ⑤  
4. ① ② ③ ④ ●  
-5. ① ② ③ ④ ⑤

Then go back and answer your difficult (+) questions. By now they may seem easier, after your mind has worked on other questions. Finally, use educated guesses to answer the impossible (-) questions. Remember, there is no penalty for guessing and it is unwise to leave any question unanswered.

Make sure to erase your "+" and "-" marks just before the end of the test, as stray marks on the answer sheet can confuse the scoring machine.

Practice this Systematic Overall Approach on the tests in this book, so it becomes a habit for the actual GED Science Test.



## **PART II: Analysis of Exam Areas**

This section is designed to introduce you to the GED Science Test by carefully reviewing the

1. Ability Tested
2. Basic Skills Necessary
3. Directions
4. Analysis of Directions
5. Suggested Approach with Samples

The emphasis in this section is on test-taking strategies and techniques.