



Thomas Jefferson High School for Science and Technology
Admissions Office
Devonshire Administrative Center, Suite 9
2831 Graham Road
Falls Church, VA 22042

How To Prepare On Your Own for the “TJ Test”

The admissions examination for Thomas Jefferson High School for Science and Technology begins with a two hour standardized test, the TJ Admissions Test. Students take a short break and then are given one hour to write two essays to provide a writing sample. Total testing time, with instructions, break, etc., is approximately four hours.

The best preparation for the admissions examination is to take, or have taken, challenging courses in elementary and middle school; to read a great deal; to do math problems beyond those required in class; and to practice your writing skills. If you want to do more preparation on your own, some suggestions appear below.

Preparing for the TJ Test

- **The Test: Nuts and Bolts**

The TJ Admissions Test is a two hour math and verbal reasoning test. The new test, which will be administered for the first time in December 2008, contains 95 test items – 45 verbal questions and 50 math questions. The verbal items include scrambled paragraphs, logical reasoning, and reading comprehension. The math items include word and computational problems.

The test is a standardized, timed test. On test day, you will receive a test booklet, an answer sheet, and a piece of scratch paper. You must bubble in your answers on the answer sheet using a number 2 pencil. You cannot bring any extra materials to the test: no self-stick or post-it notes, no highlighters, no page flags. You also cannot use a dictionary or other study aids or a calculator. So, as you prepare for the test, use only the tools you are allowed: your pencil, one piece of plain scratch paper, and your magnificent brain!!

- **The *Student Handbook for the Admissions Test: Your Best Resource***

For students who wish to learn more about the test, there is a test preparation handbook for the TJ Admissions Test, the *Student Handbook for the Admissions Test for Thomas Jefferson High School for Science and Technology*, which was prepared by the testing company that produces the admissions test. The handbook is available to download from the admissions website: www.TJAdmissions.org.¹

¹ The *Fairfax County Public Schools Student Handbook for the Admissions Test for Thomas Jefferson High School for Science and Technology* © NCS Pearson, Inc. is posted on the TJ Admissions website with the permission of the publisher. All rights reserved.

The Student Handbook describes the test and includes a Study Guide that offers advice on test preparation and test-taking strategies. The handbook also includes a complete sample test (with answer sheet) that you can use for practice. Answers to the sample test also are provided so that you can check your work and identify areas on which you may want to focus as you prepare for test day.

- **Practice Tips**

If you have not taken many timed-tests like the TJ Admissions Test, you may want to take the practice test under conditions similar to the ones you will have on test day. Find a quiet place to work and have a watch or timer available to keep track of the time (or get someone to be your “test administrator” and ask them to give you warnings after an hour has passed and five minutes before your time is up.). Then, take the test. When two hours have elapsed, STOP. Check your answers. How did you do? Did you manage your time well? Could you identify parts of the test that you need to budget more time for when you take the test in December? Do you want/need more practice?

If you decide that you want some additional practice questions, there are several additional resources that might be helpful. For example, various commercial entities have published study aids for tests that are similar to the TJ Admissions Test, including the SSAT (the Secondary School Admissions Test, given by many private high schools) and the SSHSAT (the Specialized Science High School Admissions Test, given for the New York City science high schools). These test preparation books usually start with a title such as "How to Prepare for . . .," and are easily ordered from online booksellers, such as amazon.com. Some also may be available locally at larger booksellers.

Many students have found these books to be helpful and several of them have been used in test preparation courses. Please note, however, that the *Student Handbook*, prepared by our testing company, states: “Commercial test preparation books that supposedly help students improve their test scores are not going to help much, but knowing what to expect on the test may be beneficial.” So, make sure you first read the Student Handbook carefully and follow the guidelines it provides.

If You Do Nothing Else To Prepare for the TJ Test

Look at the sample test in the Student Handbook and read the instructions for each section of the test several times, so that you are sure you understand what you are being asked to do in each section. You do not want to be reading the instructions for the first time on test day.

Preparing for the Essays

- **The Essays: Nuts and Bolts**

After students take the TJ Admissions Test, they have a short break and then must write two essays. Students are given one hour to complete the two essays. Each essay is written on a special essay form that is provided to all students taking the test. This form (on an 8 ½ by 11 inch piece of paper) contains a box (approximately 7 3/8 inches square) in which students write their essays. The box is lined and lines are approximately 3/8 inch apart.

Students must write their essays solely in the box on the essay form. Essay readers are instructed not to read anything written outside of the box. Essays must be written in pen (not pencil) blue or black ink. Erasable pens are not recommended as the ink in those pens, like pencil marks, may smudge and become difficult to read. You cannot use correction fluid. So, if you need to change something in your essay, just cross it out neatly. Cross-outs and handwriting cannot be considered in the scoring of essays.

- **The Essay Questions: Examples**

One essay focuses on real-world problem solving, often with an ethical component. Basically, you will be presented with a problem to solve and be asked to make a decision or take a position on the problem presented. There is no right or wrong answer – you need to be able to support any positions you take. Your essay will be evaluated on the following criteria: (a) knowledge and understanding of the essay topic; (b) problem-solving ability; (c) clear and effective communication; and (d) organization and development. An example of the question that focuses on real-world problem solving, possibly with an ethical component, is the following:

“As a member of a U.S. research team seeking to develop a vaccine for a common form of cancer, you have the option to working with a lab in another country that is doing the same sort of research and is interested in collaboration. Do you choose to work as a single U.S. research team (which may take longer but bring prestige to your team) or to work with the other country’s team (which may bring earlier but shared success)? Include your reasons and ramifications of your choice.”

The second essay focuses on self-assessment or self-reflection. Your second essay will be evaluated on the following criteria: (a) knowledge and understanding of the essay topic; (b) well defined explanation of essay response; (c) clear and effective communication; and (d) organization and development. An example of the question that focuses on self-assessment or self-reflection is as follows:

“Please discuss in detail an activity in science, mathematics, or technology in which you have been involved in the 6th, 7th, or 8th grade that has had a significant impact on your interest in science, mathematics, or technology.”

- **Practice Tips**

To prepare for the essay writing portion of the admissions examination, work on your essay writing skills. Start with the two essay prompts that are provided here. Keep track of the time (or get someone to be your “test administrator” and ask them to give you warnings after a half-hour has passed and five minutes before your time is up). Then, write the two essays. When one hour has elapsed, STOP. How did you do? Did you manage your time well?

Re-read what you wrote. Were your responses clear? Ask someone else to read your responses and ask them for feedback on your writing as well. Was your writing clear? Did you answer the prompt completely and with detail? Did the reader feel that you answered the essay prompt clearly, completely, and with detail? Does the reader have some constructive criticism that will help you focus your future writing?

Do you now want/need more practice? Then, get in the habit now of writing every day, even if it’s only for five minutes. If you write every day, you will improve your writing skills. (Great writers, like great musicians and great athletes, improve with practice.) You also will have practice writing when you do not necessarily want to write and when you are not sure what to write.

Then, keep writing.

What else could you write about? Write about an article you read in the newspaper or a book you are reading or a news item that you heard on the television or radio. Ask your siblings or parents for questions as well, so that you get practice writing about topics you did not think up.

The Benefits of Writing Every Day

The one day you do not want to have writer’s block is on TJ test day. If you get in the habit of writing every day, you will develop your own strategies on how to approach tough questions and will be well-prepared for test day.

What Else Can You Do to Prepare?

There are other things you can do on your own to prepare for the TJ admissions test, as well, including the following:

- **Read, Read, Read:** Read for vocabulary and for comprehension. Look up unfamiliar words in the dictionary and work on building your vocabulary skills. Look at how paragraphs are structured and how writers use language and phrases to form well-organized, cohesive paragraphs. Have your parents help with reading comprehension by reading the same newspaper or magazine articles that you read and then discussing them with you.
- **Get Extra Math Practice:** Do the extra credit problems, or the unassigned problems, for math homework. Get in the practice of doing simple math computations quickly and accurately without a calculator (you cannot use one during the test).
- **Work on Your Reasoning Skills:** Try puzzle books, logic games, and Sudoku-like exercises to stretch your brain and help develop your logical reasoning skills.
- **Write Daily:** Work on your essay writing skills. Even if you only write for 5 minutes a day, a daily focus on writing will help combat "writer's block" on test day.
- **Relax!!** Get organized the night before the test – get your supplies together and plan what you are going to wear (dress for comfort). Get a good night's sleep the night before the test and eat a good breakfast on test day!! Last minute cramming will not improve your test scores and will only make you anxious and tired before the test.

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