NYC Guide to the

Specialized High Schools Admissions Test (SHSAT)

for 2026 Admissions

The information in this guide is accurate at the time of publication but may be subject to change. Check for the most up-to-date information at **schools.nyc.gov/SHS**, **schools.nyc.gov/High**, and **MySchools.nyc**.

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Contents

3
3
3
4
6
18
26
26
26
27
27
28
29
29

1.0 Prepare to take the SHSAT

Families should review this section together so that students are well prepared for the test.

1.1 Know What to Expect

- □ Become very familiar with the design of the test by reviewing the following on the NYC SHSAT Portal:
 - description of the test on the SHSAT website
 - the two full-length sample tests
 - each sample test's answer key and explanations
 - specific sample Grade 9 questions (if you plan to take the test as a 9th grader)
- ☐ Become familiar with the NYC SHSAT Portal (https://nycshsat.myassessmentsupport.com).
 - You will access the Student Readiness Tool (SRT) here to become familiar with the different types
 of items and online tools.
 - Access the digital practice tests and explanations for practice test items.
 - ELL students who receive a glossary should select the practice test link where their home language is indicated to be able to access the online pop-up glossary
- ☐ Become familiar with the directions for each section so that you:
 - fully understand what you have to do for each part of the test: Reading Comprehension, Revising/Editing Parts A & B, Math Fill in the Blanks and Math Multiple Choice
 - can focus your time on answering the questions rather than reading the directions on test day
 - if needed, can view translated directions. Translated directions are available on the NYC SHSAT Portal.
- Become familiar with the Student Readiness Tool (SRT) on the NYC SHSAT Portal so that you can:
 - fully understand how to engage and interact with each item type
 - fully understand how to use the tools and navigate through the digital test

1.2 Take the Practice Tests

- - There are two sample tests on the NYC SHSAT Portal (https://nycshsat.myassessmentsupport.com), and you can use them in any way you want; you are encouraged to use at least one of the tests to practice taking a full test under timed conditions. You will not need to log in or download an application to take the practice tests, and your answers will not be saved. A summary of your correct and incorrect responses will be provided.
 - You can find explanations for each item within the exhibit or you can find a PDF of all of the explanations on the NYC SHSAT Portal.
 - You have 180 minutes to complete the test; eligible English Language Learners or students with extended time as an approved testing accommodation have 360 minutes to complete the test.
 - You may begin the test in whatever section/part you want, so decide in advance what order you will take the test in.
 - You may divide time between the ELA and Math sections however you want.

 Manage your time with a watch or clock. You will have 180 minutes of test time (students with an extended time accommodation have 360 minutes). Smart watches are not permitted on test day.
 Start answering questions in either the ELA or Math section.
Remember, it is up to you to decide which section you take first!
Work carefully, but keep moving at a comfortable pace.
Do not spend more than a couple minutes on any one question.
☐ Select your answer on the screen.
Follow the directions carefully for how to select your answers.
Use the bookmark tool to flag questions you want to return to later.
 All questions must have answers selected.
All answers must be selected online BEFORE the test time ends. Remember: you won't be given extra time to transfer answers to the digital form!
☐ An educated guess can be the right answer.
 Do this by eliminating the answer choice(s) that are definitely wrong and choosing from among the remaining answers.
 Your score is based on the number of correct answers selected. Because there is no penalty for wrong answers, omitting a question will not give you an advantage.
☐ Check your work if you have time remaining.
 If you finish before the test times ends, go back over your work to make sure that you followed instructions, did not skip any questions, and did not make careless mistakes. Remember: there is no penalty for wrong answers, so make sure you do not leave any questions unanswered.
 Note that on testing day, you must remain in the testing room for the entire duration of the test (180 minutes).

1.3 Check Your Answers from the Sample Test

- After you complete the sample test, review the summary report which identifies the items you answered correctly or incorrectly.
 - Read the explanations of the correct answers to see the kinds of mistakes you may have made.
 - Check to see whether there is a pattern to your errors.
 - **ELA Example:** did you miss many questions about central idea or author's purpose?
 - Math Example: did you miss many questions because of miscalculations?
 - Seek out opportunities to do more practice in areas that challenged you!

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How to Prepare for the English Language Arts Section

The English Language Arts section consists of 57 questions that assess reading comprehension and revising/editing skills. These questions are aligned to the **New York State Next Generation English Language Arts Learning Standards**. The pages that follow provide tips for answering the reading comprehension and revising/editing questions.

Inventory your Tools				
Highligher		Highlight text you want to note as important.		
Answer Eliminator	×	Cross out answer options you know aren't correct.		
Notepad	=	Make notes to keep for reference across the test.		
Line Reader Mask	+	Cover the text surrounding certain lines for focus.		
Bookmark	П	Mark any question so you can later return to it.		
Glossed Word Pop-up Definitions	underline	Words underlined with a dotted line have been defined for you. Click on the underlined word to read the pop-up definition.		

Overview of Reading Comprehension

This section assesses your ability to read and comprehend texts of both literary and informational genres, which may include any of the text types listed below.

Informational genre may include	Lit
expository/explanatory texts	poe
argumentative texts	adv
functional text in the form of:	hist
personal essaysspeeches	mys
opinion pieces	myt
 essays about art or literature 	scie
 biographies 	real
memoirsjournalism	alle
 historical, scientific, technical, or economic 	par
accounts written for a broad audience	sati
	crea

Literary genre may include		
poetry		
adventure stories		
historical fiction		
mysteries		
myths		
science fiction		
realistic fiction		
allegories		
parodies		
satire		
creative nonfiction		



Tips for Reading Comprehension

Read the text carefully while being mindful of time; don't skim.

- Read the text carefully to ensure you have an accurate and textbased understanding of both the big ideas and important details.
- Monitor your comprehension while you read; if a sentence or paragraph is confusing, try quickly rereading it.

Take notes or highlight the text.

➤ Jot *brief* notes to identify important details, summarize ideas, etc., while reading the text in its entirety. You may want to use the digital notepad or the piece of scrap paper and pencil to take notes.

Read the question carefully.

- ➤ Read the question carefully so that you clearly understand what the question is asking. For example, do you need to focus on details in just one paragraph or multiple paragraphs?
- ➤ If time permits, reread the relevant part or parts of the text.

Try to determine the answer before reading the answer options.

- ➤ Think of the answer before reading each option. Then read each answer option, eliminating ones that definitely seem incorrect, and choose the one that best matches your thinking. You may wish to use the answer eliminator to mark the incorrect answer choices.
- ➤ Base your answers only on the content of the text (and associated images or graphics where relevant). Do not depend on your prior knowledge of the topic.

Plan your tools.



- Practice the tools you will use: highlighter, answer eliminator, note pad, line reader
- ➤ Glossed words: Words in the text with a definition provided for you will be marked with an underline.
- ➤ Bookmark Tip: If you are unsure of an answer to a question, take your best guess. Use the bookmark feature to mark the question for review. During the 2025 test, you be will able to return to it if you have time remaining.

Plan your time.



➤ Before test day, plan how much time you will spend on each of the texts and their related questions in the Reading Comprehension section; this will help you to be efficient when answering each question on test day.

Sample Questions for Reading Comprehension

Snoozing While Soaring

- 1 Certain types of birds soar for hundreds of miles, over land, over sea—and never stop to rest.
 That kind of endurance seems impossible to us, since we as people need time to rest and sleep.
 Researchers set out to learn how birds could fly for such long distances without restorative rest.
 They found that for some birds, settling in for a good night's rest is not always a necessity.
- In 2013 Felix Liechti and his research colleagues at the Swiss Ornithological Institute published results of a study about the flight habits of Alpine swifts, small birds that migrate annually between Europe and Africa. Liechti and his team fitted the birds with small electronic tags that recorded the birds' acceleration and their pitch, or angle relative to the ground. The data revealed that the birds remained completely airborne during their time in Africa, a period of over 200 days. Since all animals require sleep, the researchers inferred that the birds slept from time to time on their long journey. However, since the electronic tags recorded only movement such as gliding or flying, and not brain waves, the question of whether birds sleep during flight remained unanswered.
- Researcher Niels Rattenborg from the Max Planck Institute for Ornithology also delved into this question. In a 2006 article Rattenborg explained that it was theoretically possible that birds could undergo a certain type of sleep while flying. Like mammals, Rattenborg explained, birds experience different types of sleep, including slow-wave sleep (SWS). Rattenborg argued that SWS during flight is plausible because SWS can happen in one hemisphere of the brain at a time, leaving half of the brain essentially awake while the other half sleeps. The eye associated with the "awake" hemisphere can still function, allowing a bird to see where it is going. Rattenborg decided that electroencephalogram (EEG) recordings of birds' brain waves would ultimately be necessary to determine whether a bird can actually sleep in flight.
- Eventually, Rattenborg and his team were able to create an experiment to prove this theory by studying frigatebirds from the Galápagos Islands. These enormous birds are good subjects for avian-sleep research because they fly far out to see to hunt fish. However, unlike many seabirds, they cannot land on the water to rest because the physical build of their body—long wings, poorly webbed feet, and minimal feather waterproofing—makes them unable to take off again from the surface of the water. Rattenborg concluded that they must remain in flight for up to two months at a time.



Tool Tip: Use highlighter while reading.



Tool Tip: Glossed words in the text are underlined to indicate that a definition is provided for you when you click on that word.

- In an article from 2016, Rattenborg outlined the team's research methods and conclusions. The team humanely implanted EEGs on the skulls of several frigatebirds. After analyzing the EEG readings of the birds while in flight, the team determined that the frigatebirds slow-wave slept for about ten seconds at a time at points when the birds were gliding upward via warm air currents, typically the safest part of the flight. While in flight the birds slept for only 45 minutes a day, which is just enough rest for the birds to function during these long flights. They later recovered from the stress of going with very little sleep when they rested for approximately twelve hours each day back on land.
- 6 Using EEG recordings, Niels Rattenborg solved the puzzle of when birds sleep while traveling long distances. His evidence proved that his theory was correct, and the birds proved themselves to be the ultimate multitaskers as they manage sleep and flight at the same time.
- **1.** Read this sentence from paragraph 1.

That kind of endurance seems impossible to us, since we as people need time to rest and sleep.

The words "endurance" and "impossible" in the sentence convey

- **A.** amazement about the physical capability of birds to remain in flight for extended periods of time over long distances.
- **B.** uncertainty about the conditions that allow birds to stay in flight for extended periods of time without rest.
- **C.** excitement about the opportunity to share research into how birds fly for extended periods of time.
- **D.** skepticism about discovering how birds can fly for extended periods of time with little or no rest.
- **2.** Which sentence from the passage **best** supports the idea that birds seem to be capable of making prolonged flights without sleeping?
 - **E.** "The data revealed that the birds remained completely airborne during their time in Africa, a period of over 200 days." (paragraph 2)
 - **F.** "In a 2006 article Rattenborg explained that it was theoretically possible that birds could undergo a certain type of sleep while flying." (paragraph 3)
 - **G.** "Rattenborg decided that electroencephalogram (EEG) recordings of birds' brain waves would ultimately be necessary to determine whether a bird can actually sleep in flight." (paragraph 3)
 - **H.** "While in flight the birds slept for only 45 minutes a day, which is just enough rest for the birds to function during these long flights." (paragraph 5)



Tool Tip: Review highlighted sections but remember the answers may come from non-highlighted text.



Tool Tip: Use the answer eliminator when you are certain an answer choice is not the correct one.

- **3.** Which statement **best** summarizes the conclusions of the studies presented in the passage?
 - **A.** Scientists used monitoring devices to determine that the seconds when migratory birds glide upward in warm air currents are safest for slow-wave sleep.
 - **B.** Using monitoring devices, scientists confirmed that migratory birds sleep for an extremely short amount of time while in flight and recuperate by sleeping for an extended period of time after they land.
 - **C.** Scientists used monitoring devices to determine that migratory birds require significantly less sleep than many other animals and to show that the birds use only one hemisphere of their brain while flying.
 - **D.** Using monitoring devices, scientists confirmed that some types of migratory birds rely on slow-wave sleep cycles in order to stay in flight for extended periods of time.
- **4.** The overall organizational structure of the passage allows the author to
 - **E.** contrast the significance of research findings related to small migratory birds with those related to large migratory birds.
 - F. compare the in-flight sleep patterns of the various types of birds examined in several studies.
 - **G.** emphasize the role of technology in studying sleep patterns of birds in flight.
 - **H.** illustrate how researchers acquired a better understanding of the sleep patterns of birds in flight.

Sample 1 Explanation

(A) Option A is the correct response because it explains that the words "endurance" and "impossible" convey amazement at the birds' ability to remain in flight for so long without resting—as opposed to human beings, who "need time to rest and sleep" (paragraph 1). Specifically, the word "impossible" implies a sense of wonder or disbelief at the birds' endurance, which allows them to continue flying for hundreds of miles without stopping. The words "endurance" and "impossible" support the idea expressed later in the passage that these birds are the "ultimate multitaskers" (paragraph 6).

Sample 2 Explanation

(E) Option E best supports the idea that birds seem to be capable of making prolonged flights without sleeping, because it expresses the idea that the birds "remained completely airborne" during "a period of over 200 days" (paragraph 2). This information is significantly more precise than the information in the other answer options. Therefore, option E provides more compelling evidence to support the idea in the question than the other answer options provide.

Sample 3 Explanation

(D) Option D best summarizes the conclusions of the studies presented in the passage. While all the options include some important details about the study of migratory birds, option D accurately states the key conclusion of these studies, which is that these birds "rely on slow-wave sleep cycles in order to stay in flight for extended periods of time" (paragraph 5). Option D's emphasis on the key conclusion rather than on key details makes it the correct response.

Sample 4 Explanation

(H) Option H best explains the effect of the overall structure of the passage. The passage presents an unresolved question in paragraph 2, while paragraph 3 explains one researcher's attempt at seeking an answer to the question. Paragraph 4 describes the bird the researchers chose due to its physical makeup and feeding habits. Paragraphs 5 and 6 illustrate the details and outcome of the study, revealing the researchers' conclusion. Therefore, the overall structure of the passage illustrates how researchers improved their understanding of the sleep patterns of birds in flight.

Overview of Revising/Editing Part A

Questions in Part A assess your ability to read a text and then make decisions that improve the overall quality of the writing. The subjects presented in these texts will include historical and current events; people, places, and technology; and phenomena in the biological sciences, physical sciences, and social sciences. Each sentence is numbered so that you can quickly locate and refer to specific parts of the passage.

The text may contain errors such as

- language misuse
- missing or unnecessary supporting details
- missing or inappropriate transitional words, phrases, or sentences
- a missing or an unclear introductory statement or concluding statement
- confusing or illogical organization
- other errors related to language and writing standards



Tips for Revising/Editing Part A

First, read the text carefully while being mindful of time; don't skim.

- ➤ To make the best use of time, read the text first. Read the questions after you have read the text closely.
- ➤ You need to understand the author's purpose, main idea, and supporting details of the text in order to answer questions about how the text could be better developed and organized, which requires careful reading.
- ➤ You may notice sentences and paragraphs that seem confusing, illogical, unnecessary, disorganized, or generally difficult to read.

Next, read each question carefully, while being mindful of time.

- Refer back to the text and reread the relevant sentences or paragraphs that are mentioned in the question.
- ➤ You will also likely need to skim the sentence before and after the sentence that is referenced in a question.
- Consider each answer option, rereading the text as necessary (and as time permits). Determine whether the option represents the best revision.

Plan your tools.



Decide which tools you will use for this section. Will you use the digital notepad or scrap paper? Will you use the highlighter tool? Practice using different tools before taking the test.

Plan your time.



➤ Before test day, plan how much time you will spend on Part A; this will help you to be efficient when answering each question on test day.

SAMPLE QUESTIONS FOR REVISING/EDITING PART A

Learning to Embrace the Gap Year

- (1) The traditional academic plan for college-bound students in the United States is to complete high school in June and begin college courses in August or September, but some experts wonder whether this plan is appropriate for all students. (2) Young adults are still exhausted from attending secondary school. (3) They are sent to college with little to no transition time. (4) They struggle with a lack of direction, have minimal life experience, and are not adequately prepared to succeed. (5) Many students are simply starting college before they are ready.
- (6) A gap year is when a student takes a one- year hiatus from schooling for nonacademic activities. (7) This break in the academic track gives young adults a chance to explore possible program options, gain volunteer experience, and achieve personal growth. (8) Through a variety of opportunities, gap year participants can develop new skills and interests. (9) The break can also help prepare students for the challenges of college coursework by giving them additional time to mature. (10) Succeeding at the college level can be challenging at first, but when determined students adjust and employ good study habits, they will thrive.
- (11) Earning money can be a tempting choice, and some young adults may find that they no longer desire a college degree after entering the workforce. (12) While gap year critics do have a valid concern, a 2010 Wall Street Journal article cited research that found that "90% of students who took a gap year had returned to college within a year." (13) And the Gap Year Association, a worldwide accredited nonprofit that promotes the benefits of a gap year, maintains that "taking a structured gap year invariably serves to develop the individual into a more focused student with a better sense of purpose and engagement in the world."
- (14) The choice to take a gap year may not be for all students, but it could be the best path for some. (15) Students need to know that this is a good choice that will be supported if it is what they want. (16) Taking a gap year could help students become more successful as adults in their community.
- 1. Which sentence should follow sentence 5 to introduce the main claim of the passage?
 - **A.** Taking a gap year away from formal education to determine their personal aspirations is the answer for these students.
 - **B.** For some students, the benefits of taking a gap year after high school could significantly increase their chances of achieving collegiate success.
 - **C.** When students are academically and emotionally prepared, they are guaranteed to experience greater success in their higher education endeavors.
 - **D.** Students who take the time to mature and gain knowledge outside of the classroom will experience more satisfaction, purpose, and accomplishment in their life.

- **2.** Which revision of sentence 8 uses the **most** precise language?
 - **E.** Through different experiences and discoveries, gap year participants can develop new skills and interests.
 - **F.** Through a range of opportunities and training, gap year participants can develop new skills and interests.
 - **G.** Through internships, work, travel, or volunteerism, gap year participants can develop new skills and interests.
 - **H.** Through a variety of jobs, programs, and charities, gap year participants can develop new skills and interests.
 - **3.** Which sentence should be added before sentence 11 to introduce the ideas in the third paragraph (sentences 11 13)?
 - **A.** Some gap year opponents worry that young adults who take a break from academia for activities such as a job may never return.
 - **B.** In addition to helping students become better prepared for college, a gap year could be useful to those with financial constraints.
 - **C.** Students complain that there is not enough time between high school and college to earn money for college.
 - **D.** There is growing concern among some experts that a gap year may be too expensive for many students to even consider.

Sample 1 Explanation

(B) Option B is the best sentence to follow sentence 5 and supports the main claim. This sentence clearly states the claim in that the gap year can lead to success in college for some, but not all, students (as revealed in sentence 14). This idea is developed throughout the passage by explaining what a gap year is and how it benefits students.

Sample 2 Explanation

(G) Option G uses the most precise language and is the correct response. The imprecise reference in sentence 8 to "a variety of opportunities" is replaced with the more specific and precise reference to what these opportunities entail. They may be "internships, work, travel, or volunteerism."

Sample 3 Explanation

(A) Option A is the correct sentence to add before sentence 11. The third paragraph introduces, and then refutes, a counterclaim about gap years in that they may encourage young people to forgo college entirely. This sentence clearly introduces this counterclaim that the paragraph elaborates on and then refutes with evidence.

Overview of Revising/Editing Part B

The language skills assessed in this section are based on the Language section of the New York State's learning standards for Grade 7, as well as skills or standards that may have been introduced in earlier grades. Each question directs you to read a sentence, a list of sentences, or a paragraph with numbered sentences. Then you are asked to address issues related to conventions of language or punctuation. Examples include

- selecting the best correction for an error
- identifying a sentence with an error
- improving the writing by combining sentences or revising part of a sentence



Tips for Revising/Editing Part B

Read the text in the box and take notes or use the highlighter tool to mark on the issues you observe, while being mindful of time.

- ➤ Are there words, phrases, or sentences that are difficult to read due to an error in language usage or punctuation?
- Is there any part of the text that could be written more clearly, concisely, or precisely?
- Quickly highlight the text when you notice an issue. This may help you to select an answer option.

Plan your tools.



➤ Decide which tools you will use for this section. Will you use the digital notepad or scrap paper? Will you use the highlighter tool? Practice using different tools before taking the test.

Plan your time.



➤ Before test day, plan how much time you will spend on this section; this will help you to be efficient when answering each question on test day.

SAMPLE QUESTIONS FOR REVISING/EDITING PART B

Sample 1: Select the sentence that needs a revision.

Which sentence in the paragraph should be revised to correct an inappropriate shift in verb tense?

(1) For 14 years, James and his dad have had a tradition of attending Yankees games together, but James is leaving for college next week, and he is agonizing over the fact that attending school in Pennsylvania and working there over the summer meant no more games with his dad. (2) One night, as James is packing his clothes into boxes, he hears a soft knock on his bedroom door. (3) As soon as he opens the door, James sees what is in his dad's hands and feels a rush of joy. (4) His dad is holding a bus ticket for a trip home on a weekend in the spring so that father and son can attend a Yankees game together!

- A. Sentence 1
- B. Sentence 2
- C. Sentence 3
- D. Sentence 4



To determine the best revisions for this paragraph, read Sentence 1 in the paragraph. If a revision does not need to be made, continue reading each sentence and answer option until you find the correct answer.

Sample 1 Explanation

(A) The sentence is written in the present tense; the verb "meant" shifts incorrectly into past tense. This verb should instead appear in the future tense, "will mean," since the verb refers to how things will be in the future. The corrected sentence will then read, "For 14 years, James and his dad have had a tradition of attending Yankees games together, but James is leaving for college next week, and he is agonizing over the fact that attending school in Pennsylvania and working there over the summer will mean no more games with his dad." The present tense, "means," could also be used, as James appears to be coming to this realization in present time. The use of "means" would make the corrected sentence read as follows: "For 14 years, James and his dad have had a tradition of attending Yankees games together, but James is leaving for college next week, and he is agonizing over the fact that attending school in Pennsylvania and working there over the summer means no more games with his dad."

Sample 2: Identify a sentence with an error.

<mark>r Which sentence</mark> in the paragraph contains an error in its <mark>construction</mark> and should be revised?

(1) In 2007, visitors to San Francisco, many of whom were attending an international design conference, had booked almost all of the city's hotel rooms. (2) Looking for a way to earn some extra money, three air mattresses were rented out by roommates Joe Gebbia and Brian Chesky. (3) The 27-year-olds put the mattresses in the loft of their apartment and charged \$80 a night, for which guests received a bed, breakfast, and internet access. (4) Soon the entrepreneurs realized that they could capitalize on their idea in a much bigger way, and they established Airbnb, a company that offers around 6 million rental listings in more than 100,000 cities worldwide.

- **E.** sentence 1
- **F.** sentence 2
- **G.** sentence 3
- H. sentence 4



Tool tip: Consider using the highlighter to mark the error when you see it. The line reader mask may also help you focus on each line of text.



To identify the sentence, read carefully while being mindful of time; don't just skim. The error could be anywhere in the paragraph.



Note that the error is specific to construction, which means it relates to how the words and phrases are placed in a sentence to represent the relationship between ideas.

Sample 2 Explanation

(F) In sentence 2, the modifier "Looking for a way to earn some extra money" incorrectly modifies "three air mattresses" when it should modify "roommates Joe Gebbia and Brian Chesky." This error in construction can be corrected by making "roommates Joe Gebbia and Brian Chesky" the subject of the main clause and using the active voice. The corrected sentence will read "Looking for a way to earn some extra money, roommates Joe Gebbia and Brian Chesky rented out three air mattresses."

Sample 3: Improve the writing by combining sentences or revising part of a sentence.

What is the **best** way to combine these sentences to clarify the relationship between ideas?

- (1) In 2019, 15-year-old Cori "Coco" Gauff defeated Venus Williams in the first round of Wimbledon.
- (2) Wimbledon is the world's most prestigious tennis tournament.
- (3) Gauff made history as the youngest player in almost 30 years to win a women's singles match at Wimbledon.
- **A.** Making history at the world's most prestigious tennis tournament in 2019, 15-year-old Cori "Coco" Gauff defeated Venus Williams, in the first round, making Gauff the youngest player in almost 30 years to win a women's singles match at Wimbledon.
- **B.** At the world's most prestigious tennis tournament, Wimbledon, 15-year-old Cori "Coco" Gauff made history in 2019 by defeating Venus Williams in the first round, making the teenager the youngest player in almost 30 years to win a women's singles match.
- **C.** In 2019, 15-year-old Cori "Coco" Gauff made history when she defeated Venus Williams in the first round of Wimbledon, becoming the youngest player in almost 30 years to win a women's singles match at the world's most prestigious tennis tournament.
- **D.** In 2019, history was made at the first round of Wimbledon, the world's most prestigious tennis tournament, when 15-year-old Cori "Coco" Gauff defeated Venus Williams to become the youngest player in almost 30 years to win a women's singles match.



To combine sentences, ask yourself

- 1. Are there any repeated words/ideas that can instead be used just once?
- 2. How are the different ideas connected? Do they represent a cause and effect, opposing ideas, a sequence, etc.?

Sample 3 Explanation

(C) This revision clarifies the idea that Gauff made history by becoming the youngest player in decades to win a women's singles match at Wimbledon and that she did so when she beat Venus Williams. The revision also explains that Wimbledon is the "world's most prestigious tennis tournament" in a way that is clear and logical.

How to Prepare for the Math Section

The Math section consists of 57 word problems and computational questions many of which are in a multiple-choice format. The Math questions involve application of mathematical skills, mathematical terms, and general concepts from the **New York State Next Generation Mathematics Learning Standards**. The SHSAT Math items will require you to apply familiar Math skills to complex, multi-step problems.

Inventory your Tools				
Highligher		Highlight text you want to note as important.		
Answer Eliminator	×	Cross out answer options you know aren't correct.		
Notepad	=	Make notes to keep for reference across the test.		
Line Reader Mask	+	Cover the text surrounding certain lines for focus.		
Bookmark		Mark any question so you can later return to it.		
Equation Editor		You will use equation editor to enter responses to some questions. Familiarize yourself with this tool so you can use it easily.		

The following pages outline a variety of tips to help you prepare for taking the Math section on the SHSAT. They include the following:

- tips to improve your Math skills in Math topics you need more practice with
- tips to familiarize you with expectations that are specific to the SHSAT and may therefore be different from other Math tests you take
- tips for answering multiple-choice Math questions
- tips for answering Math fill-in-the-blank questions

Math questions on the Grade 8 test forms are based on the New York State's learning standards through Grade 7. Math questions on the Grade 9 test forms are based on material through Grade 8.



Tips to Improve Your Math Skills

Review Math resources.

➤ Use your Math textbook, seek out other Math resources at school or at your local library, or ask your teacher to recommend resources for you to use.

Practice solving Math questions every day. Solve both basic and challenging questions.

- ➤ Basic questions reinforce Math skills such as simplifying fractions and applying the concepts of statistics.
- More challenging questions require setting up complex equations with multiple steps. They may also require using various types of Math skills. For example, you may use fractions, solve equations, and apply your knowledge of statistics to answer one question.



Things to Keep in Mind While Preparing for the Math Section

Use mathematical terms, symbols, and formulas used in class until you are comfortable using them.

- ➤ You must know the meanings of mathematical terms that are appropriate for your grade level, such as "parallel" and "perpendicular," as well as the symbols that represent those terms.
- ➤ You can find mathematical terms, symbols, and formulas, such as those for perimeter and area of different figures, in the materials for your Math classes and online in the Grade 7 and 8 New York State Next Generation English Language Arts and Mathematics Learning Standards.
- Review the meanings and proper use of mathematical symbols on the Equation Editor palette such as parentheses (), square root, and multiplication dot.
- ➤ Definitions and explanations for terms, symbols, and formulas will NOT be given in the test booklet. Practice using them to solve questions until you have committed the formulas to memory and can use them with ease.

Do not use a calculator when solving questions.

➤ The use of calculators is **not** permitted while taking the SHSAT.

Plan your tools.



➤ Decide which tools you will use on the math section. Will you use the digital notepad tool or scrap paper? Will you highlight important parts of the question?

Plan your time.



➤ Before test day, plan how much time you will spend on the Math section; this will help you to be efficient when answering each question on test day.



Tips for Solving Math Problems

- ➤ Read carefully so that you accurately set up complex problems using *all* the important information from the question.
- Mark up the question, as in Sample 1, to ensure you include all the information when solving the problem.

Read each question carefully.

- ➤ Use the answer eliminator to mark answers you think are incorrect.
- ➤ Change words from the question into mathematical symbols (as noted in Sample 1 and Sample 2). Decide if you will use scrap paper or the digital notepad. It may be quicker for you to use a scrap paper if that is how you are used to doing math problems. You should select the method that is best for you.

Sample 1

x, x+1= -15

The sum of two consecutive integers is -15. If 1 is added to the smaller integer and 2 is subtracted from the larger integer, what is the **product** of the two resulting integers?

Sample 2

J-5 K+5

Jenny starts a game with twice as many marbles as Keiko. Jenny gives Keiko 5 marbles, but she still has 10 more than Keiko. How many marbles did Jenny have to start with?

A. 25

+10 **B**. 30

J=2K

C. 35

J-5=(K+5)+10

D. 40



Tool Tip: Use the answer eliminator to mark answers you think are incorrect.

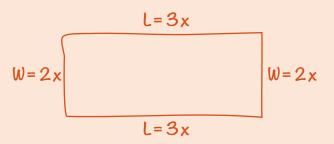


Tool Tip: You may want to use the notepad OR you may prefer to use scrap paper.

Draw figures or diagrams for questions that do not have them.

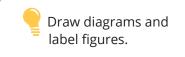
➤ Draw figures or diagrams, like in the example below, to help you visualize what the question is describing.

Sample 3



The perimeter of a rectangle is 510 centimeters. The ratio of the length to the width is 3:2. What are the dimensions of this rectangle?

- **E.** 150 cm by 105 cm
- **F.** 153 cm by 102 cm
- **G.** 158 cm by 97 cm
- **H.** 165 cm by 90 cm





Tool Tip: Decide whether you will use the digital notepad or scrap paper to draw the diagram.

Take one step at a time.

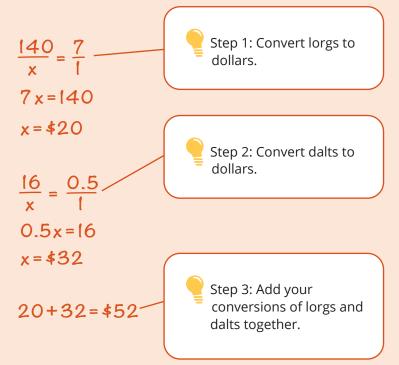
➤ Some questions ask you to combine a series of steps. Write out one step at a time, like in the example below, to solve multi-step problems.

Sample 4

1 dollar = 7 lorgs 1 dollar = 0.5 dalt

Malik has 140 lorgs and 16 dalts. If he exchanges the lorgs and dalts for dollars according to the rates above, how many dollars will he receive?

- **A.** \$28
- **B**. \$52
- **C.** \$182
- **D.** \$282





Tips for Math Multiple-Choice Questions

Most multiple-choice questions should be done by working out the answer.

➤ Solving the problem *before* looking at the answer options is more effective than looking first at the answer options and *then* trying to estimate the accuracy of each one to get to the correct answer.

It is best to solve problems on paper (rather than just in your head) and to focus on *solving* rather than *selecting*. When you get an answer, look at the choices listed. If your answer is included among the choices, and you believe it to be the correct answer, mark it. If it is not, reread the question and solve it again.

► If your answer is not among the answer options, consider other ways to write your answer. For example, $\frac{5}{9}(3 + x)$ is equivalent to all of the following: $\frac{5(3 + x)}{9}$ and $\frac{5}{3} + \frac{5}{9}x$ and $\frac{5}{3} + \frac{5x}{9}$.

➤ If your answer is still not among the answer options, make your best guess and/or come back later if you have time.

Sample 1 Explanation

If x is the smaller consecutive integer, then x + 1 is the larger consecutive integer. Use their sum -15 to find x:

$$x + (x + 1) = -15$$

 $2x + 1 = -15$

$$2x = -16$$

$$x = -8$$

The two consecutive integers are -8 and -7.

One is added to the smaller integer: -8 + 1 = -7.

Two is subtracted from the larger integer: -7 - 2 = -9.

Find the product: $-7 \times -9 = 63$.

Sample 2 Explanation

(D) Set up some equations.

Jenny (J) has twice as many marbles as Keiko (K): J = 2KJenny gives Keiko 5 marbles, so now they each have: J - 5 and K + 5 marbles. Jenny still has 10 more than Keiko: J - 5 = (K + 5) + 10

To find how many marbles Jenny had to start with, solve J = 2K for K and substitute that into the second equation:

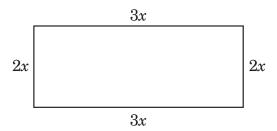
In equation J = 2K, solve for K: $K = \frac{J}{2}$. Substitute $\frac{J}{2}$ in for K. J - 5 = (K + 5) + 10 $J - 5 = (\frac{J}{2} + 5) + 10$ $J - 5 = \frac{J}{2} + 15$

 $\frac{J}{2} = 20$

J = 40 marbles

Sample 3 Explanation

(F) Let 2x = the width and 3x = the length. Draw the rectangle to help visualize.



Since 2w + 2I = P, we get

2(2x) + 2(3x) = 5104x + 6x = 510

10x = 510

x = 51

2x = 102cm and 3x = 153 cm

Sample 4 Explanation

(B) Use proportions to make the conversions:

Lorgs to dollars:

$$\frac{140}{x} = \frac{7}{1}$$

$$7x = 140$$

$$x = $20$$

Dalts to dollars:

$$\frac{16}{x} = \frac{0.5}{1}$$

$$0.5x = 16$$

$$x = $32$$

Total dollars = 20 + 32 = \$52

Prepare for Testing Day

Plan your approach.



- ➤ Which subject will you start with?
- ➤ Will you bookmark items you do not know the answers to in order to come back or will you work out the answer to each question as best you can before moving to the next?

Plan your tools.



- ➤ Check out the Student Readiness tool tutorial so you are familiar with all the tool options.
- Practice using the tools on items in the practice tests.
- Learn which tools help you and do not slow you down.
- ➤ Decide which tools you will use in each section on test day.

Plan your time.



- > Plan how much time you will spend on each subject.
- ➤ Plan how much time you will spend reading each passage and related items.
- > Plan how much time you will spend on each math item.
- ➤ Decide if you want to keep the clock visible on the test tool bar or if you will hide the clock on test day.

2.0 Get Ready for Test Day

2.1 What to Bring to Your Testing Session

You MUST bring the following to the testing session:

Assistive Technology (if indicated on your IEP and test ticket)

You CAN, but are not required to bring:

- your SHSAT test ticket signed by you and your parent/guardian
- slant board
- sharpened pencils and eraser
- pencil grip
- FM unit
- highlighter
- a watch that is silent and NOT a calculator
- a quiet, unwrapped snack (Students can have their snack before the beginning of the test administration; snacks are NOT allowed during testing time.)
- water (in a soft or plastic container that doesn't make noise if tipped)

2.2 What NOT to Bring

Not Permitted

- computer (you will be provided with a device to test on)
- cameras
- x calculators
- x smart watches
- MP3 Player/iPod
- X tablet/iPad, ebook reader
- * smart phones, ear pods, non-electronic earpods, smart glasses, cell phones, any other electronic device
- × outside written materials
- x soda, juice, or any other drinks beyond water; water is the only beverage allowed in the testing site

Note on Cell Phones

Cell phones are permitted in test site, but:

- 1. they must be turned off
- 2. you may not have them with you during the test—this means they may not be in your pocket, hand, or desk

The test site will instruct you on what to do with your cell phone before the test starts. You will be instructed to turn off and store cell phones, cameras, and other electronic devices according to the regulations set by the test site.

Will Be Provided

- a computer device to test on.
- scrap paper, which can be used to take notes and for Math calculations and will be collected at the end of the test.
- ELLs and eligible former ELLs ONLY will have access to a bilingual glossary for the exam. See the SHSAT website for additional information on ELL testing supports.

2.3 Test Day Expectations

- Be sure to arrive at the test site at the time that is on your SHSAT test ticket. Please note that this is the arrival time, not the time that the test will start. The test will begin as soon as possible after the time on your ticket. In some cases, the test may begin an hour or more after the arrival time noted on the test ticket. Your testing site can provide you with estimated times when the test will end and students will be released.
- Before the test begins, our site staff may take a photograph or video of the students in each testing room. These images will be used for test security purposes only.
- All students taking the SHSAT must stay in testing rooms for the entire standard test administration time (180 minutes), with the exception of using the bathroom.
- Once the standard test administration time (180 minutes) is over, students with an accommodation of extended time may leave if they have finished working on the exam. Students who decide to leave after the first 180 minutes of the standard test administration time must sign out to indicate they understood they gave up their remaining available time on the SHSAT. Students with this accommodation will have a break at the conclusion of the 180 minutes, and then again after another 90 minutes have passed.

2.4 Beginning of Test

Before taking the test, you will read the acknowledgement on the screen which states you are well enough to take the test, a resident of New York City, and you are taking the test for the correct grade level. Selecting the box on this screen indicates your agreement.

If you do not feel well, you should inform the test proctor immediately; you should not select the box on the acknowledgement screen or begin the test. Once you begin the test, you may not be able to request a make-up due to illness.

■ Be sure you are taking the test for the correct grade level.

When you are told to begin the test, you must read and follow the directions for how to select your answer for each item. Use the bookmark button to flag any items you want to return to. Use the review drop-down menu to identify unanswered and bookmarked items. You can navigate directly to an item within this menu.

You may write on the scrap paper provided to work through ELA or Math questions, but your answers must be selected within the online form in order to be counted. It will not be possible to answer questions after the test time ends. Information on scrap paper will not be counted.

2.5 Student Misconduct

Test security is critical for the SHSAT. As such, the following rules are strictly enforced to ensure all students have a fair testing experience.

- During the test, you may not attempt to communicate with other students in any way. This includes, but is not limited to:
 - speaking, writing and passing notes
 - sharing your answers with another student
 - looking at other students' answers
 - recording test questions
 - possessing a cell phone, camera or other electronic device (even if it is powered off)
- Once the test ends and/or your test proctor instructs you to stop, you may no longer use any digital tools, enter responses, write on your scrap paper or select any changes to your answers on the screen.
- Test questions and answers may not be shared with any individuals outside of the testing site.

Students found to be engaging in any of these activities will have their tests invalidated.

- Grade 8 students will not be allowed to take the test again until the following school year.
- Grade 9 students will not have any additional opportunities to take the test after Grade 9.

Any student who refuses to put away or turn in a prohibited device will not be allowed to take the test. Possession of prohibited items at any time during the test administration, even if powered off, will result in the test being invalidated. Students will not be provided with an opportunity to make up the exam on a subsequent day.

3.0 What Happens After I Take the SHSAT?

3.1 Claims of Testing Irregularities

The NYCDOE works hard to ensure that the SHSAT is administered in a fair and consistent manner to all students. If, however, you believe there is a disturbance or problem during any part of the SHSAT, bring the matter to the immediate attention of the proctor. This may include student illness, technical difficulties, an error on the test, undue distraction, or improper student behavior. The proctor will attempt to remedy the situation and may take a written statement from you at the end of the test.

You and your parents/guardians may also report any suspected proctoring or testing irregularities in one of the following ways:

- 1) By submitting an electronic request to **HSEnrollment@schools.nyc.gov**, or
- 2) By sending a written request via certified mail with proof of delivery to:

Office of Student Enrollment 52 Chambers Street, Room 415 New York, NY 10007

All requests must be submitted no later than **one week** after your test administration date.

For all claims, please include parent/guardian and student names, as well as telephone and/or email contact information. Any claims of testing irregularity postmarked later than one week after the test date may not be considered. Claims will be responded to on an individual basis.

Additional Remedy: If you are unsatisfied with our response to your appeal, you may appeal the NYCDOE's decision to the Commissioner of the New York State Education Department as stated in New York Education Law 310. Learn how to pursue such an appeal on the Commissioner's website at **counsel.nysed.gov/appeals**.