

# A Guide to the Written Test

for the

# Firefighter Series

(For all municipalities except White Plains, Mount Vernon, and New Rochelle)

Andrew M. Cuomo Governor Lola W. Brabham Commissioner

## **TEST GUIDE**

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## **GENERAL INFORMATION**

**Introduction:** The New York State Department of Civil Service has developed this test guide to familiarize you with the written test used for the Firefighter *examination series*. The information presented below may help you in preparing to take one or more of the examinations in this examination series.

What is an examination series: An examination series is a collection of examinations that are held on the same date and use the same test booklet(s). Examination series may contain just a few examinations or several hundred.

**Determining the Subject Areas in your examination(s):** To determine the subject areas that are included in your examination(s), you should refer to the Examination Announcement(s) for the particular examination(s) you will be taking. The subject areas are listed under the heading "Subjects of Examination."

**Using the Candidate Directions provided at the test site:** When you take your examination(s), you will be given a set of Candidate Directions. Read these very carefully so that you correctly identify the questions you need to answer for the examinations you are taking.

**Test questions:** All the test questions included in the Firefighter examination series are multiple-choice questions. No specialized knowledge of firefighting is required. See the sample questions in the subject area sections in this test guide for examples.

**Subject area information:** After the list of subject areas, information is provided on how candidates will be tested in each of the subject areas listed. For each subject area, a Test Task is provided. This is an explanation of how questions will be presented and how to correctly answer them. Read each explanation carefully. (Please note: This test guide may not provide information on every subject area included in your examination.)

**Sample questions:** This test guide provides at least one sample question for each subject area listed. The sample questions will be similar to what will be presented in the test booklet(s). This test guide provides the Solution and correct answer for each sample question presented. You should study these in order to understand how the correct or best answers were determined.

**Test security:** Please read the brief discussion on Test Security provided at the end of this guide. It provides an explanation of test takers' obligations and responsibilities.

**Helpful tips for taking the test:** The last section of this guide contains some helpful tips on how to prepare for and take a Civil Service test.

- 1. ABILITY TO LEARN AND APPLY INFORMATION: These questions test for the ability to learn new information and apply it to answer questions effectively. Candidates will read information presented in a Training Lesson and then answer questions regarding the information and procedures covered in the Training Lesson. All information needed to answer the questions will be provided in the Training Lesson, and candidates will be able to refer to the Training Lesson when answering the questions. Some of the questions may require candidates to combine information from different portions of what has been learned in the Training Lesson. No prior knowledge of any specific job or subject matter is needed.
- 2. BASIC ARITHMETIC: This section requires candidates to use basic arithmetic (add, subtract, multiply, divide) to find a missing value in a table of numbers. Candidates will not need to refer to the Training Lesson or any other section of the test to answer the questions in this section. All information needed to answer each question will be contained in this section. No knowledge of firefighting or any other job is required. Candidates should bring a hand-held battery- or solar-powered calculator for use on this test. Candidates will not be permitted to use the calculator function on their cell phone.
- 3. READING COMPREHENSION: These questions test for the ability to understand written materials (e.g., sentences, passages) and answer questions about the information presented. Candidates will be provided with reading passages, followed by questions related to each passage. Each question will require candidates to demonstrate that they have read and understood the information contained in the passage.
- 4. SITUATIONAL JUDGMENT: This section tests for the ability to identify appropriate and effective responses to work-related challenges. Candidates will be presented with several scenarios that reflect the types of challenges one could encounter in a work environment. They will then be asked to rate the effectiveness of a number of possible responses to each scenario.

ABILITY TO LEARN AND APPLY INFORMATION: These questions test for the ability to learn new information and apply it to answer questions effectively. Candidates will read information presented in a Training Lesson and then answer questions regarding the information and procedures covered in the Training Lesson. All information needed to answer the questions will be provided in the Training Lesson, and candidates will be able to refer to the Training Lesson when answering the questions. Some of the questions may require candidates to combine information from different portions of what has been learned in the Training Lesson. No prior knowledge of any specific job or subject matter is needed.

**TEST TASK:** In this section of the exam, candidates will read information from a Training Lesson to help them learn how to operate a piece of equipment. The training information is about a piece of equipment that is not real; it was created for the exam. Because the piece of equipment is not real, no prior knowledge of any specific job or subject matter is needed to answer the questions in this section.

Candidates will study the information presented in the Training Lesson, take notes if desired, and answer questions about information contained in the Training Lesson. Each question will be followed by four possible answers. Candidates must select the correct answer to demonstrate what they have learned in the Training Lesson. Candidates will be able to refer to the Training Lesson while answering the questions.

#### SAMPLE TRAINING LESSON:

## **Introduction to the Systems Monitor**

This training lesson will provide you with a brief introduction to the Building Safety Systems Monitor (i.e., Systems Monitor). The Systems Monitor is a wall-mounted panel that monitors the building's security and fire safety systems, including the building's smoke detectors, carbon monoxide detectors, alarm systems, and fire sprinkler systems.

## **Smoke Detector Monitoring Functions**

A picture of the Systems Monitor front panel is presented in Figure 1.

At the top left of the panel, you will see the "Smoke Detectors" section with eight displays labeled SD-1 through SD-8. These displays provide information about the eight smoke detectors installed throughout the building. Each display has an indicator light and a status message display.

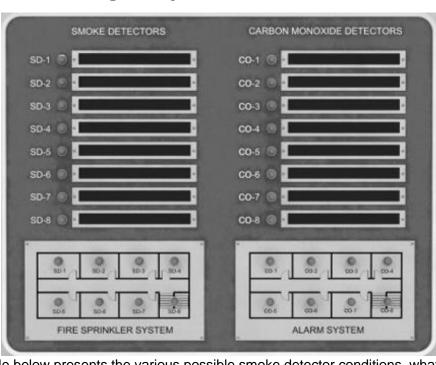


Figure 1. Systems Monitor Front Panel.

The table below presents the various possible smoke detector conditions, what will be displayed on the indicator light, the status message display under each condition, and the appropriate action to be taken under each condition.

Table 1. Smoke Detector Conditions.

Smoke Detector Condition	Indicator Light will be	Status Message Display will read 	Appropriate Action
Operating normally; no smoke detected	Green	Blank	No action needed.
Smoke detected	Flashing Red	"808 Smoke Detected"	Alert building security, who will investigate the area and contact local fire department if necessary. Immediately after alerting building security, you must alert a supervisor.
Failed self-check	Red	"801 Failed Self- Check"	Send technician who will examine detector, and repair or replace it if necessary.
Power loss to smoke detector	Off	"802 Power Loss"	Notify electrician.

This concludes our brief introduction to the smoke detector monitoring features of the Systems Monitor.

## SUBJECT AREA 1 - CONTINUED

#### **SAMPLE QUESTION 1:**

If power is cut to a smoke detector, what will you see displayed on the Systems Monitor for that detector?

- A. 808 Power Loss
- B. 802 Power Loss
- C. 801 Failed Self Check
- D. nothing; blank display

The correct answer to sample question 1 is B.

**SOLUTION TO SAMPLE QUESTION 1:** To answer this question correctly, candidates must refer to the information presented in Table 1 in the Training Lesson.

**Choice A**: Table 1 in the Training Lesson lists the possible status message display readings, and "808 Power Loss" is not among the displays listed. Therefore, choice A is incorrect.

**Choice B**: Table 1 in the Training Lesson states that, in the event of a power loss to the smoke detector, the status message display will read "802 Power Loss." Therefore, choice B is the correct answer.

**Choice C**: Table 1 in the Training Lesson states that the status message "801 Failed Self-Check" will be displayed if the smoke detector self-check fails, and not in the event of power loss to the smoke detector. Therefore, choice C is incorrect.

**Choice D**: Table 1 in the Training Lesson states that the status message display will be blank if the smoke detector is operating normally and no smoke is detected, not in the event of power loss to the smoke detector. Therefore, choice D is incorrect.

## SUBJECT AREA 1 – CONTINUED

#### **SAMPLE QUESTION 2:**

What should you do **first** if the Systems Monitor shows a smoke detector with the message "808 Smoke Detected?"

- A. alert building security
- B. contact local fire department
- C. alert a supervisor
- D. alert a technician

The correct answer to sample question 2 is A.

**SOLUTION TO SAMPLE QUESTION 2:** To answer this question, candidates must refer to the information presented in Table 1 in the Training Lesson.

**Choice A**: Table 1 in the Training Lesson states that, in the event of smoke detected, the first thing you should do is alert building security. Therefore, choice A is the correct answer.

**Choice B**: Table 1 in the Training Lesson states that, in the event of smoke detected, you should alert building security. It also states that building security, not you, will then contact the local fire department if necessary. Therefore, choice B is incorrect.

**Choice C**: Table 1 in the Training Lesson states that, in the event of smoke detected, you should alert a supervisor **after** you have alerted building security. Therefore, choice C is incorrect.

**Choice D**: Table 1 in the Training Lesson states that you should alert a technician in the event of a failed self-check, and not in the event of smoke detected. Therefore, choice D is incorrect.

**BASIC ARITHMETIC:** This section requires candidates to use basic arithmetic (add, subtract, multiply, divide) to find a missing value in a table of numbers. Candidates will not need to refer to the Training Lesson or any other section of the test to answer the questions in this section. All information needed to answer each question will be contained in this section. No knowledge of firefighting or any other job is required. **Candidates should bring a hand-held battery- or solar-powered calculator for use on this test.** Candidates will **not** be permitted to use the **calculator** function on their **cell phone**.

**TEST TASK:** Questions in this section will present numeric information in a table, with some values missing, and ask candidates to calculate the missing value(s) using basic arithmetic functions. Candidates may write in the test booklet and/or use a calculator for this section. Quiet, hand-held, solar- or battery-powered calculators are permitted. Cell phones and devices with typewriter keyboards are strictly prohibited.

### **SAMPLE TABLE:**

The table below presents yearly alarm events, per each type of alarm, for each year from 2014 through 2018. The total number of alarms for each year is presented in the bottom row.

Yearly Alarm Events  Number of Each Type of Alarm Per Year					
	2014	2015	2016	2017	2018
Smoke Detected	8	12	14	ccc	5
Smoke Detector Failed Self-Check	12	19	15	15	9
Smoke Detector Power Loss	18	21	25	6	DDD
CO Detected	12	19	16	12	13
CO Detector Failed Self-Check	23	AAA	19	10	24
CO Detector Power Loss	22	17	20	5	8
Yearly Total	95	101	BBB	69	77

Please refer to this table when answering sample questions 1 and 2 on the next page.

## **SUBJECT AREA 2 – CONTINUED**

### **SAMPLE QUESTION 1:**

What number should be entered into the table in place of missing value AAA?

- A. 9
- B. 13
- C. 15
- D. 19

The correct answer to sample question 1 is B.

**SOLUTION TO SAMPLE QUESTION 1:** To answer this question correctly, candidates must note that there were a total of 101 alarms in the year 2015. In other words, when the values for all six types of alarm events from the year 2015 are added together, the total will equal 101. Adding the number of alarms for the five types of alarm events presented in the table (excluding "CO Detector Failed Self-Check" for missing value AAA) produces a total of 88.

$$12 + 19 + 21 + 19 + 17 = 88$$

88 plus missing value AAA will equal 101. To find missing value AAA, candidates must therefore subtract 88 from 101.

$$101 - 88 = 13$$

Therefore, choice B is the correct answer.

### **SAMPLE QUESTION 2:**

What number should be entered into the table in place of missing value **BBB**?

- A. 89
- B. 99
- C. 109
- D. 119

The correct answer to sample question 2 is C.

**SOLUTION TO SAMPLE QUESTION 2:** Missing value BBB represents the total number of alarms in 2016. To find this missing value, simply add together the values for all six types of alarm events that occurred in 2016.

$$14 + 15 + 25 + 16 + 19 + 20 = 109$$

Therefore, choice C is the correct answer.

**READING COMPREHENSION:** These questions test for the ability to understand written materials (e.g., sentences, passages) and answer questions about the information presented. Candidates will be provided with reading passages, followed by questions related to each passage. Each question will require candidates to demonstrate that they have read and understood the information contained in the passage.

**TEST TASK:** In this section of the exam, candidates will read a number of brief written passages. Each reading passage will be followed by questions pertaining to that passage. Each question will be followed by four possible statements. Candidates must choose the statement that best answers the question.

#### SAMPLE READING PASSAGE:

## **BRG Services Website Excerpt**

Thank you for choosing to install the Building Safety Systems Monitor, manufactured by BRG Services (BRG). At BRG, our mission is to provide equipment and services to ensure the safety and security of your building and its occupants in a cost-effective, professional, and personalized manner. To that end, our Solutions Consultants will work closely with you to identify a solution that is the right fit for your needs.

Devices such as the Building Safety Systems Monitor provide cutting-edge, premium, continuous monitoring to immediately alert you to fire- or carbon monoxide-related issues. But the protection of your personnel and property go beyond being alerted to an emergency – you also need a plan of action in the event such an emergency arises, and you need someone responsible for ensuring that plan is well executed when the time comes. In fact, local law requires all buildings within the city limits to have an Emergency Plan Director (EPD).

At BRG, we can fill this need for you. Our trained, professional EPDs identify the possible scenarios in which emergency action plans are necessary. They also then form those plans, review them with your organizational leadership and local first responders, and ensure all plans are legal, thorough, and actionable. EPDs break down each plan for you into concrete steps. They work closely with you to ensure that the needed equipment, hardware, and supplies for each plan are on hand and available across your facility.

More importantly, BRG's EPDs make sure the people within your facility know their roles in the event of any kind of emergency. We ensure they get the appropriate training to handle their responsibilities should the need ever arise. We offer regular refresher training and even formal certification if needed to ensure staff on your premises are up to date with the established action plan.

Contact us today if you are in need of an EPD!

## **SUBJECT AREA 3 – CONTINUED**

#### **SAMPLE QUESTION:**

According to the reading passage, what is the primary reason you should have an Emergency Plan Director?

- A. to alert you to fire- or carbon monoxide-related issues in the building
- B. to ensure you have a well-designed plan to protect your personnel and property in case of emergency
- C. to train and certify your staff on the proper operation of the Systems Monitor
- D. to ensure you have a direct contact with local law enforcement and first responders

The correct answer to sample question 2 is B.

**SOLUTION:** To answer this question correctly, candidates must evaluate each choice against the written material provided and determine which choice is correct.

**Choice A**: Paragraph 2, Sentence 1 of the reading passage states that the Building Safety Systems Monitor (not the Emergency Plan Director) will "alert you to fire- and carbon monoxide-related issues." Therefore, Choice A is incorrect.

**Choice B**: Paragraph 2, Sentence 2 of the reading passage states that "...the protection of your personnel and property go beyond being alerted to an emergency – you also need a plan of action in the event such an emergency arises, and you need someone responsible for ensuring that plan is well executed when the time comes." The Emergency Plan Director is referred to in paragraph 3 as the trained professional who can help with the creation and execution of such a plan. Therefore, Choice B is the correct answer.

**Choice C**: Paragraph 4, Sentence 3 of the reading passage states that an EPD can provide training and certification "to ensure staff on your premises are up to date with the established [emergency] action plan" (not on the operation of the Systems Monitor). Therefore, Choice C is incorrect.

**Choice D**: Paragraph 2, Sentence 3 of the reading passage states that "local law requires all buildings within the city limits to have an EPD," but it does not state that the EPD would be in direct contact with local law enforcement and first responders. Therefore, Choice D is incorrect.

**SITUATIONAL JUDGMENT:** This section tests for the ability to identify appropriate and effective responses to work-related challenges. Candidates will be presented with several scenarios that reflect the types of challenges one could encounter in a work environment. They will then be asked to rate the effectiveness of a number of possible responses to each scenario.

**TEST TASK:** In this section, candidates will read a scenario that describes a challenge one might encounter in a work setting. After reading each scenario, candidates will then be presented with options for addressing the challenge presented in that scenario. Candidates will rate the effectiveness of **each** of the response options using one of four possible ratings: Highly Ineffective, Somewhat Ineffective, Somewhat Effective, or Highly Effective.

There may be several approaches that effectively (or ineffectively) address a given challenge. In other words, candidates may use the same rating (e.g., Highly Effective, Somewhat Effective, Somewhat Ineffective, Highly Ineffective) for more than one response option for a particular scenario.

#### **SAMPLE SCENARIO:**

#### Setting:

John is part of the night crew at a manufacturing company. John's supervisor has asked him to help Kevin, a coworker who has been on the job a few months less than John. Kevin has not been performing well in a particular area, and the supervisor wants John to help Kevin develop his skills.

**John:** "Kevin, I wanted to share with you some ideas that I really think could help you out."

**Kevin:** "Thanks, but no thanks. I know our supervisor asked you to help me, but I'm doing just fine on my own."

**John:** "Actually, our supervisor is concerned that your performance in this area is not where it should be. That's why he asked me to try and help you."

**Kevin:** "Look, I don't need your help and you're not my boss. In fact, you were only hired a couple of months before me, so why do you think you're so much better than I am?"

<u>Instructions:</u> A number of possible responses to this scenario are listed on the next page. Read each response option and then rate the level of effectiveness that best describes each possible response to the scenario, using the scale provided.

Be sure to rate the effectiveness of <u>all</u> the response options. Note that the same rating (Highly Effective, Somewhat Effective, Somewhat Ineffective, Highly Ineffective) may be used for more than one response option.

Please rate each possible scenario response using this scale.

-	Somewhat	_	
Highly Ineffective	Ineffective	Somewhat Effective	Highly Effective
	Likely to result in	Likely to result in	
Likely to result in far	somewhat more	somewhat more	Likely to result in far
more negative than	negative than positive	positive than negative	more positive than
positive outcomes	outcomes	outcomes	negative outcomes
(A)	®	©	0

## Possible Scenario Responses:

- 1. John tells Kevin that he is just doing what he was told.
- 2. John tells Kevin that they need to work together or the supervisor will be upset with both of them.
- 3. John tells Kevin it is disrespectful to talk to any of his colleagues that way, even if they are not his supervisor.
- 4. John tells Kevin that they will both be more successful if they work together and learn from one another.
- 5. John explains to Kevin that this is an area where he could be of help, and suggests that Kevin may be able to help him in a different area.

**SOLUTION:** The correct rating for each response option is presented and explained below.

**Response Option 1**: This response is **Somewhat Ineffective**. Though it is true that John is doing what his supervisor told him to do, this response does not further the goal of helping Kevin develop his skills.

**Response Option 2:** This response is **Somewhat Effective**. John's attempt to try and work with Kevin is positive, but the reason should be so they can help one another to each improve their skills/performance, not simply to avoid the supervisor's disapproval.

**Response Option 3**: This response is **Highly Ineffective**. Calling Kevin disrespectful will likely only aggravate Kevin more, and this response does not further the goal of helping Kevin develop his skills.

**Response Options 4**: This response is **Highly Effective**. This response emphasizes cooperation and mutual benefit and keeps the focus on the ultimate goal of performing more effectively.

**Response Options 5**: This response is **Highly Effective**. This response represents a positive, constructive approach to the situation. John is demonstrating that he does not think he is superior to Kevin and that they can both be of help to each other to achieve the ultimate goal of performing more effectively.

## TEST SECURITY

The test candidates will be taking is the property of the New York State Department of Civil Service. Candidates may not remove test material from the test site and may not reproduce, reconstruct, or discuss the test content with others. Unauthorized possession or disclosure of the test material is prohibited by law and punishable by imprisonment and/or a fine. Additionally, candidates who violate this policy may be disqualified from appointment to the positions for which the examination is being held and from being a candidate for any civil service examination for five years. After candidates take the test, other individuals may want to talk with them about the test. Candidates should not discuss the questions and answers, even in general terms. Candidates should be careful that they do not inadvertently violate test security and put themselves at risk.

## HELPFUL TIPS FOR TAKING THE TEST

Your attitude and approach to the test will influence how well you perform. A positive attitude will help you do your best.

#### Before the test ...

- Study and review this guide to familiarize yourself with what the test will cover.
- Study and review the subject areas that will be covered on the test.
- Read the General Guide to Written Tests on our website, www.cs.ny.gov/testing/testguides.cfm.
- Get plenty of rest the night before the test.

#### On the day of the test ...

- Arrive at the test site on time.
- Bring your Admission Notice, two No. 2 pencils, a photo ID containing your signature, a quiet lunch or snack, and any other **allowed** materials.
- Do NOT bring this test guide to the test site.

#### At the test site ...

- Do **NOT** bring cell phones, beepers, headphones, or any electronic or other communication devices to the test site.
- The use of such devices anywhere on the grounds of the test site (this includes the test room, hallways, restrooms, building, grounds, and parking lots) could result in your disqualification.

### During the test ...

- Read and follow all directions on your Admission Notice, test booklets, answer sheets, and Candidate Directions.
- Follow the Monitor's instructions.
- Before choosing an answer, read all of the answer choices.
- Be sure the answer you mark on your answer sheet corresponds to the response option you are choosing.
- Be sure the question number on your answer sheet corresponds to the number of the exam question you are answering.
- Keep track of time.

#### After the test ...

- Do **NOT** remove any test materials from the test room.
- Do **NOT** paraphrase, reconstruct, or reproduce the test material in any way.
- Do NOT discuss the test material with others.

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