

**New York State
Department of Civil Service**

Committed to Innovation, Quality, and Excellence

A Guide to the Written Test

for the

Public Health Technician Series

Opportunities at **work.**



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Governor

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INTRODUCTION

The New York State Department of Civil Service has developed this test guide to familiarize you with the written test for the Public Health Technician Series. This test guide provides a general description of the subject areas which will be tested and the different types of questions you may see on the test. The Examination Announcement will specify the exact subject areas to be included on the particular examination you will be taking.

The written test for the Public Health Technician Series has an overall time allowance of 3 hours. The test questions will cover the following three subject areas:

- 1. ARITHMETIC REASONING:** These questions test for the ability to solve arithmetic problems which are presented in sentence or short paragraph form. Knowledge of addition, subtraction, multiplication, and division is necessary. Questions may also involve the use of percents, decimals, and fractions.
- 2. UNDERSTANDING AND INTERPRETING WRITTEN MATERIAL:** These questions test for the ability to understand and interpret written material.
- 3. PRINCIPLES OF BIOLOGY, CHEMISTRY, AND GENERAL SCIENCE:** These questions test for basic knowledge of the physical world and the scientific laws that govern it.

The remainder of this test guide explains how you will be tested in each of the subject areas listed above. A **TEST TASK** is provided for each subject area. This is an explanation of how a question will be presented and how to correctly answer it. Read each explanation carefully. This test guide also provides at least one **SAMPLE QUESTION** for each subject area. The sample question is similar to the type of questions that will be presented on the actual test. This test guide provides the **SOLUTION** and correct answer to each sample question. You should study each sample question and solution in order to understand how the correct answer was determined.

SUBJECT AREA 1

ARITHMETIC REASONING: These questions test for the ability to solve arithmetic problems which are presented in sentence or short paragraph form. Knowledge of addition, subtraction, multiplication, and division is necessary. Questions may also involve the use of percents, decimals, and fractions.

TEST TASK: For each question, you must read the problem, understand the situation presented, decide what must be done to answer the question, and apply the appropriate arithmetic operation(s), in the correct order, in order to arrive at the correct answer.

SAMPLE QUESTION 1:

3,000 clients visited a health facility during the week ending June 10. During the following three weeks, the number of clients increased each week by 10% over the previous week's count. How many clients visited the facility during the week ending July 1?

- A. 3,300
- B. 3,630
- C. 3,900
- D. 3,993

The correct answer to sample question 1 is D.

SOLUTION TO SAMPLE QUESTION 1:

To solve this question, you must first determine that there are 3 weeks between June 10 and July 1. Since, for each of those three weeks, the number of clients increased by 10% over the previous week's count, you must take the previous week's count and add 10% to it, three successive times, as shown below:

- *During the week ending June 10, 3,000 clients visited the health facility. One week later, on June 17, the number of clients had increased by 10% over the 3,000 count on June 10. (10% of 3,000 clients = 300 clients; 3,000 clients on June 10 + 300 more clients by June 17 = 3,300 clients who visited the facility during the week ending June 17.)*
- *During the week ending June 24, the number of clients increased by 10% over the count on June 17. (10% of 3,300 clients = 330 clients; 3,300 clients on June 17 + 330 more clients by June 24 = 3,630 clients who visited the facility during the week ending June 24.)*
- *During the week ending July 1, the number of clients increased by 10% over the count on June 24. (10% of 3,630 clients = 363 clients; 3,630 clients on June 24 + 363 more clients by July 1 = 3,993 clients who visited the facility during the week ending July 1.)*

Therefore, the correct answer to sample question 1 is 3,993 (choice D).

SAMPLE QUESTION 2:

An office received 2,400 license applications during the month of April, 1/5 of which were for insurance licenses. If 1/8 of the applications for insurance licenses were rejected, how many applications for insurance licenses were accepted?

- A. 60
- B. 180
- C. 420
- D. 780

The correct answer to sample question 2 is C.

SOLUTION TO SAMPLE QUESTION 2:

To solve this question, you must first determine how many license applications were for insurance licenses:

- *Since 1/5 of the 2,400 license applications during April were for insurance licenses, the number of insurance applications was 480. ($1/5 \times 2,400 = 480$)*

You must then determine how many applications for insurance licenses were rejected:

- *Since 1/8 of the 480 applications for insurance licenses were rejected, the number of rejected insurance license applications was 60. ($1/8 \times 480 = 60$)*

You can now determine how many applications for insurance licenses were accepted:

- *Since 60 applications for insurance licenses were rejected, the number of applications for insurance licenses that were accepted is 420. (480 total insurance license applications minus 60 rejected insurance license applications = 420 accepted insurance license applications)*

Therefore, the correct answer to sample question 2 is 420 (choice C).

SUBJECT AREA 2

UNDERSTANDING AND INTERPRETING WRITTEN MATERIAL: These questions test for the ability to understand and interpret written material.

TEST TASK: For each question, you will be provided with a brief selection of written material, followed by a question and a set of alternative statements relating to the written material. You must choose the statement that best answers the question. Base your answer on whether the statement 1) accurately paraphrases portions of the written material; or 2) adequately summarizes the written material; or 3) presents an inference that can reasonably be drawn from the written material.

SAMPLE QUESTION:

"Increasingly, behavior termed 'road rage' is being viewed as a public health issue, because of the number of deaths and injuries related to it. Such behavior is often a reaction to feeling one has been treated unfairly by another driver, and is much less likely to occur if a driver is treated fairly. 'Fair play' on the road includes the observance, not only of traffic regulations, but also of the rules of courtesy. Courteous driving is based on common sense consideration for other drivers and a strong desire to make the roads safe for everyone. Good highway manners should become just as much a matter of habit as other kinds of manners."

Which one of the following statements is best supported by the above selection?

- A. Courteous driving contributes to road safety.
- B. Those who are generally polite are also courteous drivers.
- C. Unlike driving courtesy, the observance of traffic regulations is a matter of habit.
- D. Being courteous when driving is more important than observing traffic regulations.

The correct answer to this sample question is A.

SOLUTION:

To answer this question correctly, you must evaluate each choice given, against the written selection provided, in order to determine the one which is best supported by the written selection.

Choice A states, "Courteous driving contributes to road safety." Choice A is supported by the statement in the written selection that, "Courteous driving is based on... a strong desire to make the roads safe for everyone." **Choice A is the correct answer to this sample question.**

Choice B states, "Those who are generally polite are also courteous drivers." Choice B is not supported by the written selection. The written selection does not mention "those who are generally polite" at all. Choice B is not the correct answer to this question.

Choice C boldly states, "Unlike driving courtesy, the observance of traffic regulations is a matter of habit." Choice C is not supported by the written selection. The written selection makes no such bold statement. Instead, the written material mildly suggests that "Good highway manners should become just as much a matter of habit as other kinds of manners." Choice C is not the correct answer to this question.

Choice D states, "Being courteous when driving is more important than observing traffic regulations." Choice D is not supported by the written selection. The written selection states, "'Fair play' on the road includes the observance, not only of traffic regulations, but also of the rules of courtesy." The written selection does not state that being courteous is more important than observing traffic regulations. Choice D is not the correct answer to this question.

SUBJECT AREA 3

PRINCIPLES OF BIOLOGY, CHEMISTRY, AND GENERAL SCIENCE: These questions test for basic knowledge of the physical world and the scientific laws that govern it.

TEST TASK: You will be presented with questions which require a knowledge of the basic principles of biology, chemistry, and general science to answer correctly. The questions are appropriate for those who have had the science courses required for the title(s) being tested. Questions may cover such areas as elementary physics; microscopic organisms; various systems of the body; scientific terminology; units of measure; basic chemistry.

SAMPLE QUESTION 1:

Which one of the following is a basic unit of mass in the metric system?

- A. dram
- B. grain
- C. kilogram
- D. pound

The correct answer to sample question 1 is C.

SOLUTION: *To answer this question correctly, you must know that the basic unit of mass in the metric system is the kilogram. The other three choices are not units of mass in the metric system. A dram is a unit of weight in the English system and represents a fraction of an ounce. A grain is the smallest unit of mass in the apothecary, avoirdupois, Tower, and Troy systems. A pound is the basic unit of mass in the English system.*

SAMPLE QUESTION 2:

Which one of the following is the electrical unit of resistance?

- A. ohm
- B. volt
- C. ampere
- D. watt

The correct answer to sample question 2 is A.

SOLUTION: *To answer this question correctly, you must know that the ohm is the electrical unit of resistance. The volt is the electrical unit of force. The ampere is the unit for the strength of an electric current. The watt is the electrical unit of power.*

SAMPLE QUESTION 3:

Of the following, which one is the smallest?

- A. a proton
- B. a neutron
- C. an atom
- D. an electron

The correct answer to sample question 3 is D.

SOLUTION: *To answer this question correctly, you must know that an atom consists of electrons which surround a nucleus of protons and neutrons, and that electrons have a much smaller mass than protons or neutrons.*

TEST SECURITY

The test you 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 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 you take the test, other individuals may want to talk with you about the test. You should not discuss the questions and answers, even in general terms. You should be careful that you do not inadvertently violate test security and put yourself at risk.

CONCLUSION

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 to be covered on 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.
- Keep track of the 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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