SCIENCE PSSA PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://sciencepssa.examzify.com

Copyright © 2026 by Examzify - A Kaluba Technologies Inc. product.

ALL RIGHTS RESERVED.

No part of this book may be reproduced or transferred in any form or by any means, graphic, electronic, or mechanical, including photocopying, recording, web distribution, taping, or by any information storage retrieval system, without the written permission of the author.

Notice: Examzify makes every reasonable effort to obtain accurate, complete, and timely information about this product from reliable sources.

SAMPLE

Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 15

SAMPLE

Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

SAMPLE

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 – 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

SAMPLE

Questions

SAMPLE

1. **What term describes a relationship between two organisms where one benefits and the other is unaffected?**

   A. Mutualism

   B. Parasitism

   C. Commensalism

   D. Competition

2. **Which term refers to nonliving factors in an ecosystem that affect living organisms?**

   A. Biotic factors

   B. Abiotic factors

   C. Environmental factors

   D. Cultural factors

3. **Which type of rock forms from the cooling of molten rock?**

   A. Metamorphic Rock

   B. Igneous Rock

   C. Sedimentary Rock

   D. Composite Rock

4. **Which term refers to the ability to perform work?**

   A. Power

   B. Energy

   C. Force

   D. Motion

5. **What do we call something put into a system to achieve a result?**

   A. Output

   B. Input

   C. Process

   D. Flow

SAMPLE

6. Which of the following is a consequence of point source pollution?

A. Widespread contamination

B. Localized impact on the environment

C. Unmeasured pollution

D. High population density

7. Which material does not allow heat or electrons to move through it easily?

A. Conductor

B. Insulator

C. Semiconductor

D. Resistor

8. What term describes the nonliving components of an environment?

A. Biotic factors

B. Abiotic factors

C. Endogenic factors

D. Exogenic factors

9. Which molecule contains the genetic information and makes up chromosomes?

A. RNA

B. Protein

C. DNA

D. Carbohydrate

10. What term describes a community of interacting organisms along with their physical environment?

A. Biome

B. Habitat

C. Ecosystem

D. Population

SAMPLE

Answers

SAMPLE

1. C
2. B
3. B
4. B
5. B
6. B
7. B
8. B
9. C
10. C

SAMPLE

Explanations

SAMPLE

1. What term describes a relationship between two organisms where one benefits and the other is unaffected?

A. Mutualism

B. Parasitism

C. Commensalism

D. Competition

The term that describes a relationship between two organisms in which one organism benefits while the other is unaffected is commensalism. In this type of relationship, one species, often referred to as the commensal, derives some benefit, such as food, shelter, or transportation, while the other species, known as the host, neither benefits nor is harmed in any significant way. This balance illustrates how diverse interactions can be in an ecosystem, with some relationships not involving direct competition or harm to the other party involved. For example, barnacles attaching to the shell of a turtle is a classic example of commensalism; the barnacles gain a place to live, while the turtle is largely indifferent to their presence. Understanding this concept helps clarify how different organisms coexist and interact in their environments.

2. Which term refers to nonliving factors in an ecosystem that affect living organisms?

A. Biotic factors

B. Abiotic factors

C. Environmental factors

D. Cultural factors

The term that refers to nonliving factors in an ecosystem that affect living organisms is abiotic factors. This concept encompasses a variety of elements such as sunlight, temperature, water, soil, and nutrients. These nonliving components play a crucial role in shaping the living environment and influencing the survival, growth, and reproduction of organisms. For instance, the amount of sunlight can determine the types of plants that grow in a particular area, which in turn affects the herbivores that feed on those plants. Similarly, temperature and water availability are critical in establishing the types of ecosystems that can thrive in different regions, from deserts to rainforests. Understanding abiotic factors is essential for studying ecological relationships and environmental science, as they provide the physical context wherein biotic factors, or the living components of an ecosystem, interact.

3. Which type of rock forms from the cooling of molten rock?

A. Metamorphic Rock

B. Igneous Rock

C. Sedimentary Rock

D. Composite Rock

Igneous rock forms from the cooling and solidification of molten rock, which can originate from magma beneath the Earth's surface or from lava that erupts onto the surface during a volcanic event. When magma cools slowly underground, it creates intrusive igneous rocks, such as granite, which have large crystals due to the extended cooling time. Conversely, when lava cools quickly on the Earth's surface, it forms extrusive igneous rocks, such as basalt, which have small crystals because of the rapid cooling process. The key characteristic of igneous rock formation is this direct relationship with molten material transitioning into a solid state, making it distinct from metamorphic rocks, which result from the transformation of existing rocks due to heat and pressure, or sedimentary rocks, which are formed from the accumulation and compaction of mineral and organic particles. Composite rock is not a recognized geological term, as rocks are generally categorized into three main types: igneous, metamorphic, and sedimentary.

SAMPLE

4. Which term refers to the ability to perform work?

A. Power

B. Energy

C. Force

D. Motion

The term that refers to the ability to perform work is energy. Energy is a fundamental concept in physics that represents the capacity to cause change or perform work. It exists in various forms, such as kinetic energy, potential energy, thermal energy, and chemical energy, among others. When energy is transferred or converted from one form to another, it can be used to perform work, which is defined in physics as the application of a force over a distance. Power, while related, specifically refers to the rate at which work is done or energy is transferred, not the ability itself. Force is the interaction that can change the motion of an object but does not directly indicate the ability to perform work without the context of energy. Motion describes the change in an object's position over time and is a result of work being done, not a measure of the ability to do work itself. Thus, energy is the accurate term for the ability to perform work.

5. What do we call something put into a system to achieve a result?

A. Output

B. Input

C. Process

D. Flow

In scientific and technical contexts, the term 'input' refers specifically to something added to a system or process to generate a desired outcome or result. Inputs are crucial for functioning systems, as they are the initial resources, data, or signals that trigger operations or reactions within various contexts, such as experiments, computer programs, or biological processes. For instance, in a scientific experiment, input could refer to the materials or variables introduced to test a hypothesis. In computing, input includes any information entered into a system for processing. This concept underscores the importance of inputs in determining the subsequent outputs or results of a system's operations.

6. Which of the following is a consequence of point source pollution?

A. Widespread contamination

B. Localized impact on the environment

C. Unmeasured pollution

D. High population density

Point source pollution refers to pollutants that originate from a single, identifiable source, such as a wastewater discharge pipe, a factory effluent outlet, or a sewer system. The defining characteristic of point source pollution is that it can typically be traced back to one specific location, which leads to a more localized impact on the environment. This means that the pollution has its greatest effects in the immediate vicinity of the source, while areas further away may not experience significant changes in water quality or ecosystems. Given this context, the localized impact on the environment accurately describes one of the main consequences of point source pollution. In contrast, widespread contamination, unmeasured pollution, and high population density relate more to other types of pollution or environmental issues, not specifically to the concentrated nature of point source pollution. Thus, understanding that point source pollution leads to localized effects is key for managing and mitigating its environmental impact.

SAMPLE

7. Which material does not allow heat or electrons to move through it easily?

A. Conductor

B. Insulator

C. Semiconductor

D. Resistor

The material that does not allow heat or electrons to move through it easily is an insulator. Insulators are designed to inhibit the flow of electricity and thermal energy. This characteristic arises because insulators have tightly bound electrons that do not move freely, which prevents them from conducting electricity. Additionally, insulators are effective in preventing heat transfer, making them ideal for applications where maintaining temperature is crucial, such as in thermal insulation in buildings or in electrical wiring to prevent shocks. In contrast, conductors are materials that allow heat and electricity to flow freely due to their loosely bound electrons. Semiconductors have properties that fall between those of conductors and insulators and can conduct electricity under certain conditions. Resistors are components that limit the flow of electric current but do not necessarily serve the purpose of insulating from heat or preventing electricity from passing through, as they are specifically designed to create resistance in a circuit. Thus, the defining features of an insulator make it the correct choice for this question.

8. What term describes the nonliving components of an environment?

A. Biotic factors

B. Abiotic factors

C. Endogenic factors

D. Exogenic factors

The term that describes the nonliving components of an environment is abiotic factors. These include elements such as sunlight, temperature, water, soil, and minerals, which all play crucial roles in shaping ecosystems and influencing the living organisms (biotic factors) within them. Understanding abiotic factors is essential because they affect the distribution and abundance of species, as well as their interactions with one another. For instance, the amount of water available in an environment can determine which plants can thrive, subsequently influencing the entire food web. This concept is foundational in ecology, highlighting the interplay between living and nonliving elements in an environment.

9. Which molecule contains the genetic information and makes up chromosomes?

A. RNA

B. Protein

C. DNA

D. Carbohydrate

The molecule that contains genetic information and makes up chromosomes is DNA (deoxyribonucleic acid). DNA is a long molecule composed of nucleotides, which are the building blocks of genetic information. This structure contains the instructions needed for the development, functioning, growth, and reproduction of all known living organisms and many viruses. Within the cells, DNA is organized into structures called chromosomes, which ensure the correct distribution of genetic material during cell division. Each chromosome carries a specific set of genes, which are sections of DNA that encode particular proteins or traits. While RNA plays a crucial role in the process of translating genetic information from DNA into proteins, it does not contain the genetic information itself nor does it form chromosomes. Proteins are the products of gene expression, and carbohydrates serve various roles in cellular structure and energy storage but are not involved in storing genetic instruction. Therefore, DNA is the key molecule when discussing genetic information and chromosomal structure.

SAMPLE

10. What term describes a community of interacting organisms along with their physical environment?

A. Biome

B. Habitat

C. Ecosystem

D. Population

The term that describes a community of interacting organisms along with their physical environment is "ecosystem." An ecosystem encompasses both the biotic components, which include all the living organisms such as plants, animals, and microorganisms, and the abiotic components, which include the non-living parts of the environment like air, water, soil, and climate. This interconnection creates a dynamic system where energy flows and materials cycle, allowing for the survival and interaction of various species within a specific area. In contrast, the other terms refer to different concepts. A biome is a large geographical area defined by specific climate conditions and types of organisms, such as deserts or forests. Habitat refers to the specific environment in which an organism lives, providing its immediate needs for life. A population is a group of individuals of the same species living in the same area at the same time. Together, these terms help geographers and ecologists describe and understand the complexity and diversity of life on Earth.

SAMPLE

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

https://sciencepssa.examzify.com

We wish you the very best on your exam journey. You've got this!

SAMPLE