PSLE Science – General Practice Test (Sample)

Study Guide

Everything you need from our exam experts!

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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.

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!

Questions

1. What is the primary function of the roots of a plant?

A. To support the plant above the ground

B. To absorb water and nutrients from the soil

C. To produce flowers and seeds

D. To perform photosynthesis

2. What term describes resources that are not replaceable and take a long time to be naturally replenished?

A. Renewable

B. Non-renewable

C. Biodegradable

D. Sustainable

3. What term is used to describe how organisms protect themselves or adapt to their environment?

A. Metabolism

B. Evolution

C. Adaptation

D. Mutation

4. Which of the following best defines matter?

A. Anything that has energy

B. Anything that can change form

C. Any object that has weight and occupies space

D. Any substance that can be seen or touched

5. What is the main source of energy for the water cycle?

A. Wind

B. The Sun

C. Rivers

D. Soil

6. Define the term "symbiosis."

A. A type of extreme competition between species

B. A relationship between two different organisms living closely together

C. The process of natural selection

D. A method of communication among species

7. Identify one adaptive trait of animals for survival.

A. Excessive growth

B. Camouflage, migration, or hibernation

C. Increased size

D. Regular mating behavior

8. What do we call animals that eat both plants and other animals?

A. Herbivores

B. Carnivores

C. Omnivores

D. Detritivores

9. What role does the large intestine play in the human body?

A. Production of hormones

B. Absorption of water and minerals

C. Digestion of proteins

D. Storage of bile

10. What term describes the flow of electrical energy through a conductor?

A. Voltage

B. Resistance

C. Current

D. Power

Answers

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

Explanations

1. What is the primary function of the roots of a plant?

A. To support the plant above the ground

B. To absorb water and nutrients from the soil

C. To produce flowers and seeds

D. To perform photosynthesis

The primary function of the roots of a plant is to absorb water and nutrients from the soil. Roots extend into the ground and form a network that helps anchor the plant while also providing access to essential resources necessary for growth and survival. Water is crucial for various physiological processes, including photosynthesis, while nutrients like nitrogen, phosphorus, and potassium are vital for the health and development of the plant. In addition to nutrient absorption, roots also play a role in storing food and providing stability. However, their main role revolves around obtaining water and nutrients from the soil, which supports the plant's overall functioning. The other options describe functions associated with different parts of the plant. For instance, flowers and seeds are produced by the reproductive system of the plant, while photosynthesis is primarily carried out by the leaves, where chlorophyll captures sunlight. Thus, the correct choice highlights the fundamental role of roots in nurturing the plant through the uptake of vital resources.

2. What term describes resources that are not replaceable and take a long time to be naturally replenished?

A. Renewable

B. Non-renewable

C. Biodegradable

D. Sustainable

The term that accurately describes resources that are not replaceable and take a long time to be naturally replenished is non-renewable. Non-renewable resources, such as fossil fuels (coal, oil, and natural gas) and minerals, exist in finite quantities on Earth. Once they are extracted and used, they cannot be replenished within a human timescale. The formation of these resources can take millions of years, making them a limited supply. This definition distinguishes them clearly as non-renewable resources in contrast to renewable resources, which can be replenished in a relatively short period. The other terms have different meanings. Renewable resources, like solar and wind energy, are those that can be replenished naturally in a short time frame. Biodegradable materials are capable of being broken down by natural processes, while sustainable refers to practices that maintain resource availability over time without causing environmental harm.

3. What term is used to describe how organisms protect themselves or adapt to their environment?

A. Metabolism

B. Evolution

C. Adaptation

D. Mutation

The term "adaptation" refers specifically to the characteristics and behaviors that organisms develop over time to survive and thrive in their particular environments. This can include physical traits, such as the color of an animal's fur or the shape of a plant's leaves, as well as behavioral changes, such as migration patterns or feeding habits. Adaptations can arise as a response to various environmental pressures, such as changes in climate, food availability, or predator presence. By evolving adaptations, organisms increase their chances of survival and reproduction in their specific habitats, showcasing the importance of these changes in the natural world. While metabolism relates to the biochemical processes within organisms, evolution is a broader concept that encompasses the change in species over time, and mutation refers to changes in genetic material. Adaptation is distinctly focused on the specific features or behaviors that enhance survival in a given environment.

4. Which of the following best defines matter?

A. Anything that has energy

B. Anything that can change form

C. Any object that has weight and occupies space

D. Any substance that can be seen or touched

The definition of matter is aptly captured by the option stating that matter is any object that has weight and occupies space. This is because matter is fundamentally characterized by two key properties: it has mass (or weight) and it takes up physical space in the form of volume. In scientific terms, matter includes all the physical substances that make up the universe, ranging from solids to liquids and gases. Everything you can see and touch in the physical world is a form of matter because it has these characteristics. The other options, while they reference important concepts related to matter, do not encapsulate the definition as accurately. For instance, energy does not fit the criteria of matter, as energy itself does not have mass or occupy space; it represents the capacity to do work or cause change. Similarly, the ideas of changing form or being able to see or touch can apply to matter but do not define it fully, as there are forms of matter that are not visible or tangible at all times, such as gases or certain substances in microscopic forms. Thus, the most precise definition remains the one that emphasizes weight and space occupancy.

5. What is the main source of energy for the water cycle?

A. Wind

B. The Sun

C. Rivers

D. Soil

The main source of energy for the water cycle is the Sun. The Sun's energy drives the process of evaporation, where water from oceans, lakes, and rivers heats up and turns into water vapor. This vapor rises into the atmosphere, where it cools and condenses into clouds, eventually falling back to the Earth as precipitation. Through this continuous process, the Sun's energy facilitates the movement of water in various states—liquid, gas, and solid—within the water cycle. While wind plays a role in moving water vapor and clouds, it does not provide the energy needed for the transformation and movement of water. Rivers and soil do store and transport water, but they do not generate the energy needed to initiate the processes within the water cycle. Therefore, the Sun is essential as it provides the energy that fuels these processes.

6. Define the term "symbiosis."

A. A type of extreme competition between species

B. A relationship between two different organisms living closely together

C. The process of natural selection

D. A method of communication among species

The term "symbiosis" specifically refers to a relationship between two different organisms that live closely together, which can take various forms, including mutualism, commensalism, and parasitism. In this context, mutualism benefits both organisms, commensalism benefits one while having little to no effect on the other, and parasitism benefits one at the expense of the other. This close association often results in a significant impact on the survival and reproduction of the interacting species. Understanding symbiosis is crucial in ecology as it highlights the interconnectedness of living organisms and how different species can coexist and influence each other's lives in their ecosystems. This concept is fundamental to grasping the dynamics of biodiversity and ecosystem health.

7. Identify one adaptive trait of animals for survival.

A. Excessive growth

B. Camouflage, migration, or hibernation

C. Increased size

D. Regular mating behavior

Camouflage, migration, or hibernation are all effective adaptive traits that enhance an animal's survival in its environment. Camouflage allows animals to blend in with their surroundings, which can help them avoid predators or become more effective hunters. For instance, a chameleon changes its color to match the environment, making it harder for prey and predators alike to spot it. Migration, on the other hand, enables animals to move from one region to another in search of better living conditions, food sources, or breeding grounds. For example, many bird species migrate south during winter to find warmer climates and access to food. Hibernation is a strategy used by some animals to survive harsh weather conditions. During hibernation, animals enter a state of dormancy, significantly slowing their metabolism to conserve energy when food is scarce. Bears are a well-known example of hibernating animals that sleep through the winter months. These adaptive traits are crucial for the survival of species by helping them respond to environmental changes, find resources, and avoid threats, reflecting a well-developed strategy for life in diverse ecosystems.

8. What do we call animals that eat both plants and other animals?

A. Herbivores

B. Carnivores

C. Omnivores

D. Detritivores

Animals that eat both plants and other animals are known as omnivores. This classification is significant in the study of ecological relationships and food webs because omnivores play a crucial role in their ecosystems, as they can consume a variety of food sources. This adaptability allows them to thrive in diverse environments, depending on the availability of food. Herbivores, on the other hand, are animals that exclusively feed on plants, while carnivores focus on consuming other animals. Detritivores are a specific group of decomposers that feed on dead organic matter, contributing to nutrient recycling but do not fit the description of animals that consume both plants and animals. Understanding these classifications helps to illustrate the complexity of food chains and the roles different species play in maintaining ecological balance.

9. What role does the large intestine play in the human body?

A. Production of hormones

B. Absorption of water and minerals

C. Digestion of proteins

D. Storage of bile

The large intestine has an essential role in the human body, primarily in the absorption of water and minerals. As food that has not been fully digested passes through the large intestine, the body extracts water and electrolytes from it. This absorption process is vital for maintaining hydration and proper electrolyte balance in the body. The remaining waste material is then compacted into feces for excretion. In this context, while the production of hormones is a function associated with various glands in the body, it is not a role of the large intestine. Digestion of proteins occurs predominantly in the stomach and small intestine, where enzymes break down these macromolecules rather than within the large intestine. Additionally, storage of bile is performed by the gallbladder, which stores bile produced by the liver for fat digestion, rather than by the large intestine. Thus, the primary function of the large intestine is indeed focused on absorption, making it crucial for overall hydration and nutrient management in the body.

10. What term describes the flow of electrical energy through a conductor?

A. Voltage

B. Resistance

C. Current

D. Power

The term that describes the flow of electrical energy through a conductor is current. Current is defined as the rate at which electric charge flows through a conductor, such as a wire. It is measured in amperes (A) and represents the movement of electrons in the conductor. When an electrical circuit is completed, current allows electrical energy to transfer from one point to another to power devices or perform work. Voltage, on the other hand, refers to the potential difference that drives the flow of current. Resistance is the opposition to the flow of current in a conductor, and it impacts how much current will flow for a given voltage. Power relates to the rate at which energy is transferred or converted and is calculated using both current and voltage. Thus, while voltage, resistance, and power are important concepts in understanding electricity, current specifically indicates the flow of electrical energy.

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://pslesciencegeneral.examzify.com

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