ONTARIO GRADE 9 DESTREAMED SCIENCE (SNC1W1) 2026 PRACTICE EXAM (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

VISIT US ONLINE FOR THE FULL VERSION STUDY GUIDE

https://ontariosnc1w1.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 type of species can threaten local habitats by outcompeting native species?**

   A. Native Species

   B. Invasive Species

   C. Resilient Species

   D. Endemic Species

2. **What defines an object that has equal numbers of protons and electrons?**

   A. Positive object

   B. Negative object

   C. Neutral object

   D. Charged object

3. **Which of the following materials typically has the lowest resistance?**

   A. Wood

   B. Copper

   C. Rubber

   D. Plastic

4. **What type of bonding is characterized by the sharing of electrons between atoms?**

   A. Ionic Bonding

   B. Covalent Bonding

   C. Hydrogen Bonding

   D. Van der Waals Forces

5. **Which of the following statements about DNA is true?**

   A. It is only present in eukaryotic cells

   B. It carries genetic information in all living organisms

   C. It can directly produce energy for the cell

   D. It is solely responsible for cellular respiration

SAMPLE

6. What type of electrical current only flows in one direction?

A. Alternating current

B. Direct current

C. Reactive current

D. Dynamic current

7. In a chemical reaction, what are reactants?

A. New substances formed

B. Substances that undergo a change to form new substances

C. Byproducts of the reaction

D. Energy released during the reaction

8. Which level of organization comes after atoms in biological systems?

A. Cells

B. Molecules

C. Tissues

D. Organ systems

9. Which is a characteristic of a chemical property?

A. Color

B. Flammability

C. Mass

D. Volume

10. Which of the following best describes an independent variable in an experiment?

A. The factor that is changed or manipulated by the researcher

B. The factor that remains constant throughout the experiment

C. The outcome measured in the experiment

D. The variable that affects the dependent variable

SAMPLE

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What type of species can threaten local habitats by outcompeting native species?

A. Native Species

B. Invasive Species

C. Resilient Species

D. Endemic Species

Invasive species are non-native organisms that, when introduced to a new environment, can disrupt local ecosystems. They often possess traits that allow them to grow rapidly, reproduce prolifically, and thrive in conditions that native species may not tolerate. This aggressive behavior enables invasive species to outcompete native species for resources such as food, space, and light. Native species, by contrast, are those that have evolved in a particular region and are well adapted to the local conditions. Resilient species are those capable of recovering from disturbances but do not inherently pose a threat to native species. Endemic species are those found only in a specific geographic area; while they can be vulnerable, they do not compete with native species outside their range. In summary, invasive species can significantly alter habitat dynamics and biodiversity by outcompeting and displacing native species, resulting in ecological imbalances.

2. What defines an object that has equal numbers of protons and electrons?

A. Positive object

B. Negative object

C. Neutral object

D. Charged object

An object that has equal numbers of protons and electrons is classified as a neutral object. This is because protons carry a positive charge, while electrons have a negative charge. When these two charges are in balance, the overall charge of the object is zero, indicating that it is neutral. In contrast, if there were more protons than electrons, the object would be positively charged, and if there were more electrons than protons, it would be negatively charged. The term "charged object" generally refers to any object that has an imbalance between its protons and electrons, whether it is positively or negatively charged. Therefore, the defining characteristic of neutrality is the equal presence of protons and electrons, leading to an overall charge of zero.

3. Which of the following materials typically has the lowest resistance?

A. Wood

B. Copper

C. Rubber

D. Plastic

Copper is known for its excellent electrical conductivity, which means it has very low resistance to the flow of electric current. This property makes it an ideal choice for electrical wiring and components because it allows electrical energy to pass through with minimal energy loss. The structure of copper at the atomic level allows electrons to move freely, facilitating this efficient conduction of electricity. In contrast, materials like wood, rubber, and plastic are insulators that impede the flow of electrical current, resulting in higher resistance. These materials have fewer free electrons available for conducting electricity, making them less effective in transmitting electrical energy. Therefore, copper stands out as the material with the lowest resistance among the given options.

SAMPLE

4. What type of bonding is characterized by the sharing of electrons between atoms?

A. Ionic Bonding

B. Covalent Bonding

C. Hydrogen Bonding

D. Van der Waals Forces

Covalent bonding is characterized by the sharing of electrons between atoms. In a covalent bond, two or more non-metal atoms come together to form a stable molecule by sharing their valence electrons. This sharing allows each atom to attain a full outer electron shell, which is energetically favorable, leading to the formation of strong bonds. For example, in a water molecule (H O), each hydrogen atom shares an electron with the oxygen atom, resulting in covalent bonds that hold the molecule together. This type of bonding is crucial in forming a wide range of organic and inorganic compounds, making it fundamental to the study of chemistry and biology. In contrast, ionic bonding involves the transfer of electrons from one atom to another, leading to the formation of charged ions that attract each other. Hydrogen bonding and Van der Waals forces refer to weaker interactions that occur between molecules rather than the direct sharing of electrons between atoms. Thus, covalent bonding uniquely and directly involves the sharing of electrons, making it the correct choice in this context.

5. Which of the following statements about DNA is true?

A. It is only present in eukaryotic cells

B. It carries genetic information in all living organisms

C. It can directly produce energy for the cell

D. It is solely responsible for cellular respiration

DNA (deoxyribonucleic acid) is indeed known for its crucial role in carrying genetic information in all living organisms, which makes the statement about it correct. DNA contains the instructions needed for an organism's growth, development, functioning, and reproduction. This hereditary material is found in both prokaryotic and eukaryotic cells, providing a universal blueprint for life. The genetic code stored within DNA is transcribed into RNA and then translated into proteins, which perform the majority of functions in a cell. The other statements do not hold true: DNA is not exclusive to eukaryotic cells, as prokaryotic cells (like bacteria) also contain DNA. DNA itself does not directly produce energy; that process is primarily the function of cellular structures like mitochondria in eukaryotes, where energy is generated via cellular respiration. Additionally, while DNA plays a significant role in determining the processes involved in cellular respiration, it is not solely responsible for it; many proteins and enzymes, coded by DNA, are involved in the respiration process alongside various metabolic pathways. Thus, the statement regarding DNA carrying genetic information is the most accurate and comprehensive.

SAMPLE

6. What type of electrical current only flows in one direction?

A. Alternating current

B. Direct current

C. Reactive current

D. Dynamic current

Direct current, or DC, is characterized by the flow of electric charge in a single direction. This type of current is commonly produced by batteries, where the voltage remains constant over time, leading to a steady flow of electrons. In various applications, such as electronic devices and circuits, direct current is crucial because it ensures a stable voltage, allowing for consistent operation. Unlike alternating current, which periodically reverses direction, direct current maintains a fixed polarity, enabling it to supply power efficiently for numerous devices. While other types of current may exhibit changing qualities or functions, direct current's unidirectional flow is a distinguishing feature that underlines its importance in both practical and theoretical contexts in physics.

7. In a chemical reaction, what are reactants?

A. New substances formed

B. Substances that undergo a change to form new substances

C. Byproducts of the reaction

D. Energy released during the reaction

Reactants in a chemical reaction are the substances that undergo a change in their chemical composition to form new substances, which are known as products. This means that during a reaction, the reactants are transformed through a variety of chemical interactions, such as bond breaking and formation, resulting in different chemical substances. When you look at the classification of substances involved in a chemical reaction, reactants are always the starting materials. They are present before the reaction takes place and participate in the transformation process. This is fundamental in understanding how chemical reactions proceed: it begins with reactants that interact to yield products, demonstrating the concept of conservation of mass, where the total mass remains constant. In contrast, new substances formed represent the products of the reaction, whereas byproducts are secondary products that may result from the reaction but are not the primary focus. Energy released during the reaction refers to the energy changes involved, which may accompany the transformation of reactants but do not define what reactants are.

8. Which level of organization comes after atoms in biological systems?

A. Cells

B. Molecules

C. Tissues

D. Organ systems

The correct progression in the levels of organization in biological systems follows a specific order, and after atoms, the next level is molecules. Atoms are the basic building blocks of matter and combine to form molecules, which are groups of atoms bonded together. Molecules play a crucial role in biology as they can form the components of cells, such as carbohydrates, proteins, lipids, and nucleic acids. Understanding this hierarchy is essential in biology because it illustrates how complex structures are built from simpler components. Molecules interact and combine to form larger structures, which subsequently lead to cells, tissues, and ultimately organ systems. The other levels of organization that follow molecules, such as cells, tissues, and organ systems, rely on the existence of molecules that give rise to their structure and function. Each level builds upon the previous one, making the study of biological systems a layered approach, starting from the simplest units like atoms to the more complex arrangements found in living organisms.

SAMPLE

9. Which is a characteristic of a chemical property?

A. Color

B. Flammability

C. Mass

D. Volume

Flammability is indeed a characteristic of a chemical property. Chemical properties describe a substance's ability to undergo chemical changes and transformations, which often result in the formation of new substances. Flammability refers to a material's ability to ignite and burn when exposed to a flame or high temperatures, indicating how that substance reacts when combined with oxygen. This property is crucial in assessing safety and risk in various environments. In contrast, the other choices reflect physical properties. Color is a physical attribute that can be observed without changing the substance's chemical structure. Mass and volume also pertain to physical characteristics; mass measures how much matter is present in an object, while volume measures the space that an object occupies. These properties do not involve a change to the substance's chemical identity or its ability to participate in chemical reactions.

10. Which of the following best describes an independent variable in an experiment?

A. The factor that is changed or manipulated by the researcher

B. The factor that remains constant throughout the experiment

C. The outcome measured in the experiment

D. The variable that affects the dependent variable

An independent variable is best described as the factor that is changed or manipulated by the researcher in an experiment. This is the variable that the researcher alters to observe how it impacts another variable, known as the dependent variable. For example, in a plant growth experiment, the amount of sunlight the plants receive could be the independent variable that you manipulate to see how it affects their growth. Understanding the role of the independent variable is crucial as it allows researchers to establish cause-and-effect relationships. By changing this variable, researchers can measure how these changes affect the dependent variable, thus gaining insights into the dynamics of the experiment. The other factors mentioned, such as the constant variables and the dependent variable, are important in the structure of an experiment, but they do not define what an independent variable is. Constant variables ensure that the experiment remains fair by not allowing other factors to influence the results, while the dependent variable is what the researcher measures to assess the impact of the independent variable.

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://ontariosnc1w1.examzify.com

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

SAMPLE