

PRAXIS ELEMENTARY EDUCATION: THREE- SUBJECT BUNDLE – SCIENCE (5905) PRACTICE TEST (SAMPLE)

STUDY GUIDE



SAMPLE STUDY GUIDE WITH LIMITED QUESTIONS

**VISIT US ONLINE FOR
THE FULL VERSION STUDY GUIDE**

<https://praxis5905.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.

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

SAMPLE

- 1. What is the basic functional unit of all living organisms?**
 - A. Cell
 - B. Nucleus
 - C. Tissue
 - D. Organ
- 2. Meiosis results in four haploid gametes from a single diploid cell. Which sequence of options places Meiosis last?**
 - A. Mitosis
 - B. Cytokinesis
 - C. Binary Fission
 - D. Meiosis
- 3. Which force is exerted on an object in contact with another stable object?**
 - A. Normal force
 - B. Tension
 - C. Contact forces
 - D. Kinetic energy
- 4. What term describes the lowest possible temperature at which particles have minimal motion?**
 - A. Absolute zero
 - B. Normal room temperature
 - C. Thermal energy
 - D. Boiling point
- 5. Which term refers to elements that react easily with other substances, are poor conductors, readily accept electrons, and are gaseous at room temperature?**
 - A. Metals
 - B. Halogens
 - C. Nonmetals
 - D. Metalloids

6. Which eon spans from about 3.9 to 2.5 billion years ago and includes the evolution of single-celled organisms?
- A. Phanerozoic Eon
 - B. Proerozoic Eon
 - C. Age of Earth
 - D. Archeozoic Eon
7. Which process describes a gas turning directly into a solid?
- A. Sublimation
 - B. Condensation
 - C. Deposition
 - D. Freezing
8. What phenomenon is produced by rapid vibrations and can be reflected off surfaces?
- A. Light waves
 - B. Electrical current
 - C. Sound waves
 - D. Radio waves
9. Which law states velocity remains constant unless a net external force acts?
- A. Newton's First Law (Law of Inertia)
 - B. Newton's Second Law (Law of Acceleration)
 - C. Newton's Third Law (Law of Interaction)
 - D. Law of Conservation of Energy
10. The sum of protons and neutrons in an atom gives its what?
- A. Atomic number
 - B. Electron configuration
 - C. Isotopic number
 - D. Atomic mass

Answers

SAMPLE

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

SAMPLE

Explanations

SAMPLE

1. What is the basic functional unit of all living organisms?

A. Cell

B. Nucleus

C. Tissue

D. Organ

Life centers on the cell. It is the smallest unit that can carry out all the processes that keep an organism alive—taking in nutrients, converting energy, eliminating wastes, growing, responding to the environment, and even reproducing. Cells come with the components needed to perform these functions, and in many organisms they contain DNA that guides those activities. Some cells have a nucleus that houses genetic material, while others do not, but either way the cell itself is the basic unit that carries out life processes. Tissues and organs are higher levels of organization built from many cells, not the fundamental unit. So the cell is the smallest unit that can function independently to sustain life across all organisms.

2. Meiosis results in four haploid gametes from a single diploid cell. Which sequence of options places Meiosis last?

A. Mitosis

B. Cytokinesis

C. Binary Fission

D. Meiosis

Meiosis is the final step in a sequence that ends with forming haploid gametes. It specifically reduces chromosome number and yields four haploid cells, which is why it sits at the end of the process for producing gametes from a diploid cell. Binary fission is how many bacteria reproduce and doesn't produce haploid gametes. Cytokinesis is the division of the cytoplasm that follows mitosis to create two cells, and mitosis is the division that separates replicated chromosomes into two nuclei before that cytoplasm splits. So meiosis is the last step in this sequence because it completes the production of haploid gametes.

3. Which force is exerted on an object in contact with another stable object?

A. Normal force

B. Tension

C. Contact forces

D. Kinetic energy

When two objects touch, they push on each other through a contact force. The part of that force that acts perpendicular to the surfaces at the point of contact is the normal force. It provides support and prevents the objects from interpenetrating, adjusting in magnitude as needed to balance other perpendicular forces like gravity. Tension is the force carried by a rope or string, acting along the rope, not as a surface contact force. Kinetic energy is not a force at all. While "contact forces" is a broad category that includes the normal force, the specific force exerted in contact between surfaces is the normal force.

4. What term describes the lowest possible temperature at which particles have minimal motion?

- A. Absolute zero**
- B. Normal room temperature
- C. Thermal energy
- D. Boiling point

At the lowest possible temperature, particle motion is minimized. This limit is absolute zero, defined as zero kelvin (about -273.15°C). In theory, reaching absolute zero would stop a substance's thermal motion, but quantum mechanics means particles retain some zero-point energy and can't be completely at rest. This makes absolute zero the boundary value for how cold matter can get. Normal room temperature is much warmer and involves noticeable molecular motion. Thermal energy is the energy associated with temperature, not a temperature itself. Boiling point is the temperature at which a liquid changes to a gas.

5. Which term refers to elements that react easily with other substances, are poor conductors, readily accept electrons, and are gaseous at room temperature?

- A. Metals
- B. Halogens
- C. Nonmetals**
- D. Metalloids

Elements that tend to react with many substances, don't conduct electricity well, readily accept electrons, and are often gases at room temperature are nonmetals. Nonmetals typically have high electronegativity and electron affinity, so they gain electrons in reactions to form negative ions or share electrons in covalent bonds. Their lack of metallic bonding means they don't have free-moving electrons, which makes them poor conductors of heat and electricity. At room temperature, many nonmetals exist as gases—like oxygen and nitrogen—while others are liquids or solids, showing a broad range of states but a common behavior: they are reactive, electron-hungry partners in compounds and generally poor conductors.

6. Which eon spans from about 3.9 to 2.5 billion years ago and includes the evolution of single-celled organisms?

- A. Phanerozoic Eon
- B. Proerozoic Eon
- C. Age of Earth
- D. Archeozoic Eon**

Think about when life first appears in Earth's history. The period from about 3.9 to 2.5 billion years ago is the Archeozoic (Archean) Eon. This is the time when Earth was cooling and oceans formed, and life begins as single-celled organisms called prokaryotes—bacteria and archaea. Fossil evidence like stromatolites shows these simple microbes building communities and, through early photosynthesis, starting to alter the atmosphere and oceans. That early emergence of simple life fits this eon exactly. Later eons bring bigger advances: the Proterozoic starts around 2.5 billion years ago with more complex cells and eventually multicellular life, while the Phanerozoic comes much later with abundant, diverse life. The term "Age of Earth" isn't a formal eon name. So the Archeozoic Eon is the best match for the time span and the evolution of single-celled organisms.

7. Which process describes a gas turning directly into a solid?

- A. Sublimation
- B. Condensation
- C. Deposition**
- D. Freezing

Deposition is the process where a gas changes directly into a solid. Gas particles lose energy and lock into a solid arrangement without becoming liquid first. This happens when conditions favor cooling or rapid energy loss, like water vapor turning into frost on a cold surface. For example, frost on a window forms by deposition of water vapor directly as ice crystals. This is different from sublimation (solid to gas), condensation (gas to liquid), and freezing (liquid to solid). So, the gas turning directly into a solid is deposition.

8. What phenomenon is produced by rapid vibrations and can be reflected off surfaces?

- A. Light waves
- B. Electrical current
- C. Sound waves**
- D. Radio waves

Sound is produced when matter vibrates rapidly, creating compressions and rarefactions that travel through a medium as waves. These waves move through air, water, or solids as longitudinal waves, with the particle motion parallel to the direction of travel. Because waves can bounce off surfaces, sound waves reflect and can create echoes, giving you a reflected sound. This fits the description of a phenomenon produced by rapid vibrations and able to reflect off surfaces. Light and radio waves are electromagnetic and aren't generated by mechanical vibrations of matter in the same way, and electrical current isn't a wave phenomenon.

9. Which law states velocity remains constant unless a net external force acts?

- A. Newton's First Law (Law of Inertia)**
- B. Newton's Second Law (Law of Acceleration)
- C. Newton's Third Law (Law of Interaction)
- D. Law of Conservation of Energy

When motion keeps going the way it is unless something pushes or slows it down, that idea is inertia. Objects resist changes in how they are moving. So if there's no net external force acting on something, its velocity stays the same: a still object stays still, and a moving object continues moving in a straight line at the same speed. In the real world there's usually some friction or air resistance, which are external forces that change velocity. In a frictionless situation, or if all forces cancel out, there's no unbalanced force, and the velocity remains constant. This principle is what the first law is all about—it explains why motion persists without a force changing it. If a net external force does act, then the motion changes (the object accelerates) according to how strong the force is and how heavy the object is. The other laws describe different relationships: the second law links force to acceleration, the third to interactions between bodies, and the conservation of energy tracks how energy moves—none of those describe the basic idea that motion persists without unbalanced forces.

10. The sum of protons and neutrons in an atom gives its what?

- A. Atomic number
- B. Electron configuration
- C. Isotopic number
- D. Atomic mass**

Mass comes from the nucleus, which is made of protons and neutrons. Adding the number of protons to the number of neutrons gives the mass number, the count that reflects how heavy the atom is. In basic terms, that mass number is what we call the atomic mass. The atomic number is only the number of protons, electron configuration describes how electrons are arranged, and there isn't a standard term called isotopic number. So the sum of protons and neutrons determines the atom's mass, i.e., its atomic mass.

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://praxis5905.examzify.com>

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

SAMPLE