GED Science Practice (Sample)

Study Guide

Everything you need from our exam experts!

Table of Contents

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 a gene in genetics?

A. a monosaccharide sugar that has several forms

B. a segment of DNA that is involved in producing a polypeptide chain

C. a gasoline substitute consisting of 90% gasoline and 10% grain alcohol from corn

D. the state of matter distinguished from the solid and liquid states by relatively low density and viscosity

2. What is the process in which an arthropod sheds its exoskeleton and manufactures a larger one to take its place?

A. Molecule

B. Mollusk

C. Molting

D. Natural immunity

3. What substance is an odorless, very poisonous gas that is a product of incomplete combustion of carbon?

A. Carbohydrate

B. Carbon Dioxide

C. Carbon Monoxide

D. Cathode

4. What term is used to describe any stimulating information or event?

A. Sublimation

B. Sweat gland

C. Stimulus

D. Sulfa drug

5. What is a constellation in astronomy?

A. a group of stars that form a pattern in the sky

B. a composite rock made up of particles of varying size

C. a device designed to transmit electricity, heat, etc.

D. a substance formed by chemical union of two or more elements or ingredients

6. Which of the following is described as an animal or plant that lives in or on a host?

A. Pathogen

B. Parasite

C. Oxygen

D. Ozone

7. What is a rigid bar pivoted about a fulcrum?

A. Latex

B. Larva

C. Lever

D. Larynx

8. Which property describes a lodestone as per the provided information?

A. Floats on water

B. Made of copper

C. Possesses polarity

D. Unable to attract metals

9. Which term is associated with the treatment of disease by exposure to radiation from a radioactive substance?

A. Recycle

B. Radiation

C. Reflex

D. Radioactivity

10. What is a "Seed" with regard to plant biology?

A. a. Water that is not hard (does not contain salts that interfere with the formation of lather with soap)

B. b. A cell that converts solar energy into electrical energy

C. c. A developed ovule consisting of a protective coat stored food and an embryo

D. d. The sun with the celestial bodies that revolve around it in its gravitational field

Answers

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

Explanations

1. What is a gene in genetics?

A. a monosaccharide sugar that has several forms

B. a segment of DNA that is involved in producing a polypeptide chain

C. a gasoline substitute consisting of 90% gasoline and 10% grain alcohol from corn

D. the state of matter distinguished from the solid and liquid states by relatively low density and viscosity

A gene is a section of DNA that contains the instructions for creating a specific protein or functional RNA molecule. It is not a sugar or a fuel substitute, nor is it a state of matter. The other incorrect options do not accurately describe a gene or its function in genetics.

2. What is the process in which an arthropod sheds its exoskeleton and manufactures a larger one to take its place?

A. Molecule

B. Mollusk

C. Molting

D. Natural immunity

Molting is the process in which an arthropod sheds its exoskeleton and manufactures a larger one to take its place. This process is necessary for the arthropod to grow and adapt to its environment. Option A, molecule, is a general term which does not specifically refer to this process. Option B, mollusk, is incorrect as mollusks are not arthropods and do not undergo molting. Option D, natural immunity, is also incorrect as it is a term related to immune response in animals, not the process of molting in arthropods.

3. What substance is an odorless, very poisonous gas that is a product of incomplete combustion of carbon?

A. Carbohydrate

B. Carbon Dioxide

C. Carbon Monoxide

D. Cathode

The correct answer is carbon monoxide. This substance is a colorless and odorless gas that is produced when carbon-containing fuels do not burn completely. Because it is produced from the incomplete combustion of carbon, it can accumulate in enclosed spaces where there is inadequate ventilation, leading to potentially lethal consequences for those exposed to it. Carbon monoxide binds strongly to hemoglobin in the blood, which prevents oxygen from being transported effectively throughout the body, causing symptoms of poisoning that can result in severe health impacts or even death. In contrast, carbohydrates are organic compounds made up of carbon, hydrogen, and oxygen, primarily serving as energy sources but not as gases involved in combustion processes. Carbon dioxide, while it is a gas produced during the complete combustion process, is not poisonous in the same way carbon monoxide is, as it is a natural byproduct of respiration and combustion. The term "cathode" refers to the electrode where reduction occurs in an electrochemical cell and is unrelated to combustion or the production of gases from burning fuels.

4. What term is used to describe any stimulating information or event?

A. Sublimation

B. Sweat gland

C. Stimulus

D. Sulfa drug

The term "stimulus" is used to describe any information or event that can provoke a response in an organism. In biological terms, a stimulus can be anything from a chemical signal to a change in the environment, such as light, sound, or temperature. For example, in the human body, a stimulus can trigger sensory receptors that send signals to the brain, leading to a specific response, such as touching a hot surface and quickly withdrawing your hand. In contrast, sublimation refers to the process where a solid changes directly into a gas without becoming liquid. Sweat glands are specialized structures in the skin responsible for producing sweat to regulate body temperature. Sulfa drugs are a category of medications used to treat bacterial infections and are unrelated to general information or events that provoke responses. Understanding the concept of a stimulus is fundamental in various fields, including biology, psychology, and physiology, as it illustrates how organisms interact with their environments.

5. What is a constellation in astronomy?

A. a group of stars that form a pattern in the sky

B. a composite rock made up of particles of varying size

C. a device designed to transmit electricity, heat, etc.

D. a substance formed by chemical union of two or more elements or ingredients

A constellation in astronomy refers to a group of stars that are perceived to form a recognizable pattern or shape in the night sky. These patterns often have historical or mythological significance and have been used for navigation, storytelling, and various cultural traditions throughout human history. The stars in a constellation may not be physically related or close together in space; instead, they appear to be grouped from our viewpoint on Earth. The other options presented do not accurately describe what a constellation is. For instance, the second option pertains to geological formations rather than celestial bodies. The third option relates to electrical devices, and the fourth describes chemical compounds, neither of which connects with the fundamental concept of constellations in the field of astronomy. Thus, the definition of a constellation being a specific grouping of stars is the correct comprehension of the term within the scientific context.

6. Which of the following is described as an animal or plant that lives in or on a host?

A. Pathogen

B. Parasite

C. Oxygen

D. Ozone

A parasite is defined as an organism, either animal or plant, that lives on or inside a host organism and benefits at the host's expense. This relationship typically involves the parasite deriving nutrients and energy from the host, which can lead to harm or disease in the host over time. Parasites can take various forms, including worms, protozoa, and certain types of insects, and their dependence on the host is a crucial aspect of their life cycle. In contrast, a pathogen specifically refers to microorganisms, such as bacteria, viruses, fungi, or parasites, that can cause disease. While all parasites can be pathogens, not all pathogens are classified as parasites. Oxygen and ozone are both gases essential for life on Earth, but they do not fit the definition of an organism living in or on a host. Therefore, the definition of a parasite accurately reflects the characteristic of living in or on a host, making it the correct choice.

7. What is a rigid bar pivoted about a fulcrum?

A. Latex

B. Larva

C. Lever

D. Larynx

A lever should be the answer because it fits the description of a rigid bar that is pivoted about a fulcrum. A fulcrum is a fixed point that a lever rotates around. The other options, latex, larva, and larynx, do not fit the description of a rigid bar pivoted about a fulcrum. Latex is a type of material, larva is a stage in an animal's life cycle, and larynx is an organ in the throat. These options are not related to the concept of a lever and fulcrum.

8. Which property describes a lodestone as per the provided information?

A. Floats on water

B. Made of copper

C. Possesses polarity

D. Unable to attract metals

A lodestone is a naturally occurring mineral that is a form of magnetite. One of its defining characteristics is its ability to possess polarity, meaning it has a magnetic north and south pole. This property allows the lodestone to attract ferromagnetic materials, such as iron and nickel, which is crucial for its identification as a magnetic mineral. The property of possessing polarity is fundamental to understanding how lodestone behaves in relation to magnetic fields. Unlike other materials, a lodestone will align itself with a magnetic field when freely suspended, further demonstrating its magnetic properties. This capacity to exhibit magnetic polarity is not only intriguing from a geological perspective but also historically significant, as lodestones were used in the development of compasses for navigation due to their ability to align with the Earth's magnetic field.

9. Which term is associated with the treatment of disease by exposure to radiation from a radioactive substance?

A. Recycle

B. Radiation

C. Reflex

D. Radioactivity

The term associated with the treatment of disease by exposure to radiation from a radioactive substance is radiation. This is a crucial concept in medical treatments, particularly in radiotherapy, where controlled doses of radiation are used to target and kill cancer cells. Radiation therapy takes advantage of the damaging effects that radiation has on both cancerous and normal cells, thereby aiming to control or eliminate tumors. The context of this treatment involves the use of high-energy particles or waves, which can disrupt the cellular structure of malignant cells. This method is highly specialized and is an essential aspect of modern medicine in combating certain diseases, especially cancers. Other choices mention terms that are relevant in different contexts. For example, recycling pertains to the processing of materials for reuse, reflex involves automatic responses in the body, and radioactivity is the property of certain substances to emit radiation but does not directly refer to the medical treatment process. Understanding the specific applications and definitions of these terms is important for grasping the broader topic of health and science.

10. What is a "Seed" with regard to plant biology?

A. a. Water that is not hard (does not contain salts that interfere with the formation of lather with soap)

B. b. A cell that converts solar energy into electrical energy

C. c. A developed ovule consisting of a protective coat stored food and an embryo

D. d. The sun with the celestial bodies that revolve around it in its gravitational field

In plant biology, a seed is defined as a developed ovule that consists of a protective coat, stored food, and an embryo. The protective coat, also known as the testa, serves to shield the seed from environmental factors and helps prevent desiccation. Inside the seed, the stored food provides the necessary nutrients for the developing embryo during germination, supporting its initial growth until it can photosynthesize on its own. The embryo is the young plant that develops from the fertilization of the ovule and will eventually grow into a mature plant. The combination of these three components—protective coat, stored food, and embryo—enables the seed to survive adverse conditions and facilitates the process of reproduction for the plant. Once conditions are favorable, the seed will germinate, leading to the development of a new plant. This biological structure is crucial for the continuation of species and genetic diversity in plants. Other options describe unrelated concepts; for instance, the first option refers to a type of water, while the second discusses a cell type unrelated to seeds, and the last option pertains to astronomical bodies rather than plant biology.

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://gedscience.examzify.com

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