Praxis Earth and Space Sciences: Content Knowledge (5571 / 5572) Practice Test (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. Which Moon phase is characterized by the Moon waxing and about a quarter of it visible?

A. New Moon

B. First Quarter

C. Full Moon

D. Waxing Gibbous

2. The point of initial movement during an earthquake is called the

A. Focus

B. Epicenter

C. Hypocenter

D. Center

3. What are the local winds called that blow from sea to land by day and from land to sea by night?

A. Sea breeze

B. Sea and land breezes

C. Land breeze

D. Mountain breeze

4. Which boundary type is most associated with the deepest earthquakes?

A. Divergent Plate Boundaries

B. Transform Plate Boundaries

C. Intraplate Regions

D. Convergent Plate Boundaries

5. Having two high tides and two low tides each day.

A. Diurnal Tide

B. Semi-diurnal Tide

C. Abyssal Plain

D. Cone of Depression

6. Which planet has a day length of about 24 hours and a year of about 687 Earth days?

A. Mercury

B. Venus

C. Mars

D. Jupiter

7. Which gas is most directly increased in the atmosphere due to widespread deforestation?

A. Oxygen

B. Methane

C. CO2

D. Nitrous oxide

8. Which phase comes after a New Moon and before the First Quarter, showing a lit crescent on the right?

A. First Quarter

B. Full Moon

C. Waxing Crescent

D. New Moon

9. What evidence in the solar spectrum indicates the presence of sodium in the Sun's atmosphere?

A. Emission lines in the solar spectrum indicate sodium

B. Absorption lines in the solar spectrum indicate sodium

C. Solar wind measurements reveal sodium ions

D. Sunspot activity reveals sodium abundance

10. Extrusive igneous rocks typically have which texture due to rapid cooling at or near the surface?

A. Fine-grained

B. Coarse-grained

C. Porphyritic

D. Glassy

Answers

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

Explanations

1. Which Moon phase is characterized by the Moon waxing and about a quarter of it visible?

A. New Moon

B. First Quarter

C. Full Moon

D. Waxing Gibbous

Waxing means the illuminated portion of the Moon is growing from night to night. After the New Moon, the Moon appears as a crescent, then reaches a stage where the illuminated part is increasing and the Moon is roughly a quarter of the way through its orbit around Earth. That stage is the First Quarter, where the Moon is waxing and the cycle has progressed about a quarter. The other phases don't fit this description: a New Moon is mostly dark and not waxing; a Full Moon is fully illuminated; and a Waxing Gibbous occurs later, with more than half lit as it moves toward the Full Moon.

2. The point of initial movement during an earthquake is called the

A. Focus

B. Epicenter

C. Hypocenter

D. Center

The starting point of the earthquake is the focus—the location inside the Earth where the rocks first break and slip, initiating the rupture that sends seismic waves outward. The epicenter is simply the point on the Earth's surface directly above this origin, so it's a surface location, not the initiation point. Some sources also use hypocenter as another term for the same internal origin, but the phrase "point of initial movement" most directly points to the focus. The term "center" isn't a technical term for earthquake origins.

3. What are the local winds called that blow from sea to land by day and from land to sea by night?

A. Sea breeze

B. Sea and land breezes

C. Land breeze

D. Mountain breeze

Local wind patterns along coasts come from how land and sea heat and cool at different rates. In the day, the sun heats the land quickly, warming the near-surface air there and causing it to rise. This creates a relatively low pressure over the land, and cooler air from the sea moves in to replace it, producing a breeze that blows from sea to land. At night, the land cools down faster than the sea, so the air over the land becomes cooler and denser while the sea stays warmer. The air over the sea rises and draws air from the land toward the sea, creating a breeze that blows from land to sea. Together, these day and night breezes are called the sea and land breezes.

4. Which boundary type is most associated with the deepest earthquakes?

A. Divergent Plate Boundaries

B. Transform Plate Boundaries

C. Intraplate Regions

D. Convergent Plate Boundaries

Deep earthquakes are tied to subduction zones, where one plate dives beneath another at a convergent boundary. As the cold, rigid slab sinks into the mantle, it stays sufficiently brittle to crack and produce seismic waves even at great depths—down to roughly 700 kilometers. This is in contrast to divergent boundaries, where quakes are typically shallow as crust is pulled apart; transform boundaries, with horizontal sliding, also produce shallower events; and intraplate regions experience earthquakes within a plate that are generally not as deep. So the boundary type most associated with the deepest earthquakes is the convergent boundary due to subduction of the plate.

5. Having two high tides and two low tides each day.

A. Diurnal Tide

B. Semi-diurnal Tide

C. Abyssal Plain

D. Cone of Depression

Tides come in patterns based on how the Moon's gravity stretches the oceans and how the Earth rotates under those bulges. When a coast experiences two highs and two lows in roughly one day, that pattern is a semi-diurnal tide. It happens because the ocean bulges raised by the Moon appear on opposite sides of the Earth, and as the planet turns, you move from one bulge to the next about every 12 hours and a bit, giving two high tides and two low tides in a 24-ish hour period. In many places those two highs are similar in height, though some locations have mixed tides where the highs differ. A diurnal tide, by contrast, would show only one high and one low each day. The other terms aren't about ocean tides: the abyssal plain is a deep, flat region of the ocean floor, and the cone of depression refers to a lowered groundwater level around a pumped well.

6. Which planet has a day length of about 24 hours and a year of about 687 Earth days?

A. Mercury

B. Venus

C. Mars

D. Jupiter

Rotations and orbits set the lengths of a day and a year. The planet described has a day about 24 hours long and a year of roughly 687 Earth days. Mars fits this best: its solar day is about 24 hours 39 minutes, making the day-night cycle very Earth-like, while its year is about 687 Earth days due to its orbit around the Sun. Mercury has a much longer day (about 58.6 Earth days) and a short year (88 days). Venus rotates very slowly (a sidereal day around 243 Earth days) but orbits in about 225 days, which doesn't match. Jupiter spins quickly (about 10 hours per day) and takes around 12 Earth years to orbit the Sun, so the combination doesn't fit either.

7. Which gas is most directly increased in the atmosphere due to widespread deforestation?

A. Oxygen

B. Methane

C. CO_2

D. Nitrous oxide

When forests are removed or burned, the carbon stored in the trees is released back into the air as carbon dioxide, and there are fewer trees left to pull CO_2 out of the atmosphere through photosynthesis. This combination—increased release and reduced uptake—causes atmospheric CO_2 to rise directly and noticeably. Other gases like methane and nitrous oxide come from different processes such as digestion in ruminant animals, manure, wetlands, and soils, so they aren't tied as directly to deforestation. Oxygen levels don't rise from deforestation in the same direct way; the CO_2 change is the most immediate consequence of removing forest cover.

8. Which phase comes after a New Moon and before the First Quarter, showing a lit crescent on the right?

A. First Quarter

B. Full Moon

C. Waxing Crescent

D. New Moon

After a New Moon, the Moon's illuminated portion starts to grow, creating a thin crescent on the right. This phase is called Waxing Crescent because the lighted area is increasing as it moves toward First Quarter. The First Quarter would show half of the Moon's near side lit on the right, not just a small crescent. A Full Moon would be completely lit, and a New Moon is generally invisible. So the phase that fits the description is Waxing Crescent.

9. What evidence in the solar spectrum indicates the presence of sodium in the Sun's atmosphere?

A. Emission lines in the solar spectrum indicate sodium

B. Absorption lines in the solar spectrum indicate sodium

C. Solar wind measurements reveal sodium ions

D. Sunspot activity reveals sodium abundance

In spectroscopy, elements reveal themselves by the way they interact with light. The Sun's light we observe is essentially a continuous spectrum produced by the hot photosphere. When this light passes through cooler layers of the solar atmosphere, atoms can absorb photons at specific wavelengths that match electronic transitions in the atoms. Those absorbed wavelengths show up as dark lines in the spectrum, called absorption lines. For sodium, the characteristic absorption appears as dark lines near 589 nanometers (the sodium D-lines). The presence of these dark absorption features at sodium's wavelengths indicates sodium is in the Sun's atmosphere. If the gas were emitting strongly at those wavelengths, you would see bright emission lines, but that isn't what the solar spectrum shows in this region. Solar wind measurements or sunspot activity don't provide the specific spectral evidence of sodium in the Sun's atmosphere.

10. Extrusive igneous rocks typically have which texture due to rapid cooling at or near the surface?

A. Fine-grained

B. Coarse-grained

C. Porphyritic

D. Glassy

Rapid cooling near the surface causes crystals to have little time to grow, so they remain very small and you get a fine-grained texture. Extrusive rocks form when magma erupts or sits at the surface and loses heat quickly, producing microscopic crystals that give the rock a smooth, uniform appearance to the naked eye. In contrast, coarse-grained textures come from slow underground cooling, and porphyritic textures come from an initial slow cooling that forms some larger crystals before rapid cooling finishes the rock. A glassy texture results when cooling is so rapid that crystals don't form at all. So, the typical texture for extrusive rocks cooled at or near the surface is fine-grained.

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://praxis5571and5572.examzify.com

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