

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## When Reality Splinters: 5th Grade Interdisciplinary Science Quiz

Learners synthesize complex scenarios to determine which scientific lens—from thermodynamics to microbiology—provides the most accurate solution for real-world problems.

---

**1. An oceanographer discovers a massive underwater thermal vent. To understand how the heat from the Earth's core affects the density of the surrounding salt water, which two branches must they synthesize?**

- A. Botany and Astronomy
- B. Earth Science and Physics
- C. Paleontology and Chemistry
- D. Zoology and Meteorology

**2. A scientist working to create a new biodegradable plastic using corn husks and bacterial enzymes is primarily working in the field of \_\_\_\_\_.**

- A. Theoretical Physics
- B. Biochemistry
- C. Geology
- D. Climatology

**3. True or False: A scientist studying how the chemical composition of a meteorite explains the formation of our solar system is practicing both Chemistry and Astronomy.**

- A. True
- B. False

**4. If you are investigating why a specific bridge collapsed during a windstorm by calculating the stress on the steel beams, which branch are you applying?**

- A. Biology
- B. Physics
- C. Ecology
- D. Oceanography

**5. A researcher tracking the migration patterns of whales using satellite GPS coordinates is combining the study of Zoology with \_\_\_\_\_.**

- A. Entomology
- B. Geology
- C. Technology and Data Science
- D. Organic Chemistry

**6. True or False: Meteorology is considered a sub-branch of Earth Science because it focuses on the Earth's atmosphere and weather patterns.**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

- A. True
- B. False

**7. Which specialist would be most helpful in determining if a newly discovered cave system contains ancient fossilized microorganisms?**

- A. Astrophysicist
- B. Paleontologist
- C. Botanist
- D. Hydrologist

**8. To solve the mystery of how a specific pesticide is affecting the eggshells of local birds, a scientist must primarily use the branch of \_\_\_\_\_.**

- A. Astronomy
- B. Environmental Science
- C. Geology
- D. Theoretical Mathematics

**9. True or False: Physics is the only branch of science that does not require the use of math or data to prove a hypothesis.**

- A. True
- B. False

**10. If you are designing a spacecraft's shield to protect it from solar radiation while it orbits Mars, which combination of expertise is most critical?**

- A. Marine Biology and Botany
- B. Meteorology and Zoology
- C. Physics and Astronomy
- D. Anatomy and Geology