

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

## Which Realm of Science Governs the Laws of Nature? 12th Grade Quiz

Seniors classify scientific scenarios by identifying the fundamental silos of inquiry that define modern research and academic categorization.

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**1. A researcher analyzing the enzymatic pathways involved in cellular respiration is working primarily within which branch of science?**

- A. Geology
- B. Biology
- C. Astronomy
- D. Physics

**2. The study of the behavior of subatomic particles and the forces that govern the structure of atoms is known as \_\_\_\_.**

- A. Botany
- B. Meteorology
- C. Physics
- D. Environmental Science

**3. Seismology and Mineralogy are sub-disciplines that fall under the umbrella of Earth Science.**

- A. True
- B. False

**4. If an investigator is testing the efficiency of a newly synthesized polymer, they are applying concepts from which branch?**

- A. Chemistry
- B. Zoology
- C. Astronomy
- D. Oceanography

**5. The investigation of light-producing chemical reactions in deep-sea organisms, known as bioluminescence, requires knowledge of both Chemistry and \_\_\_\_.**

- A. Astronomy
- B. Geology
- C. Biology
- D. Meteorology

**6. Astrophysics is a discipline that exclusively uses Earth Science to study the internal core of our planet.**

- A. True
- B. False

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**7. Which branch of science is most concerned with the impact of industrial runoff on local aquatic ecosystems?**

- A. Physics
- B. Astronomy
- C. Environmental Science
- D. Paleontology

**8. A scientist measuring the gravitational pull exerted by a distant exoplanet on its host star is primarily conducting research in \_\_\_\_.**

- A. Astronomy
- B. Chemistry
- C. Biology
- D. Geology

**9. Thermodynamics is a major area of study within the branch of Physics.**

- A. True
- B. False

**10. The study of the prehistoric climate through the analysis of ice cores is a cross-disciplinary field mainly rooted in which branch?**

- A. Astronomy
- B. Earth Science
- C. Botany
- D. Genetic Engineering