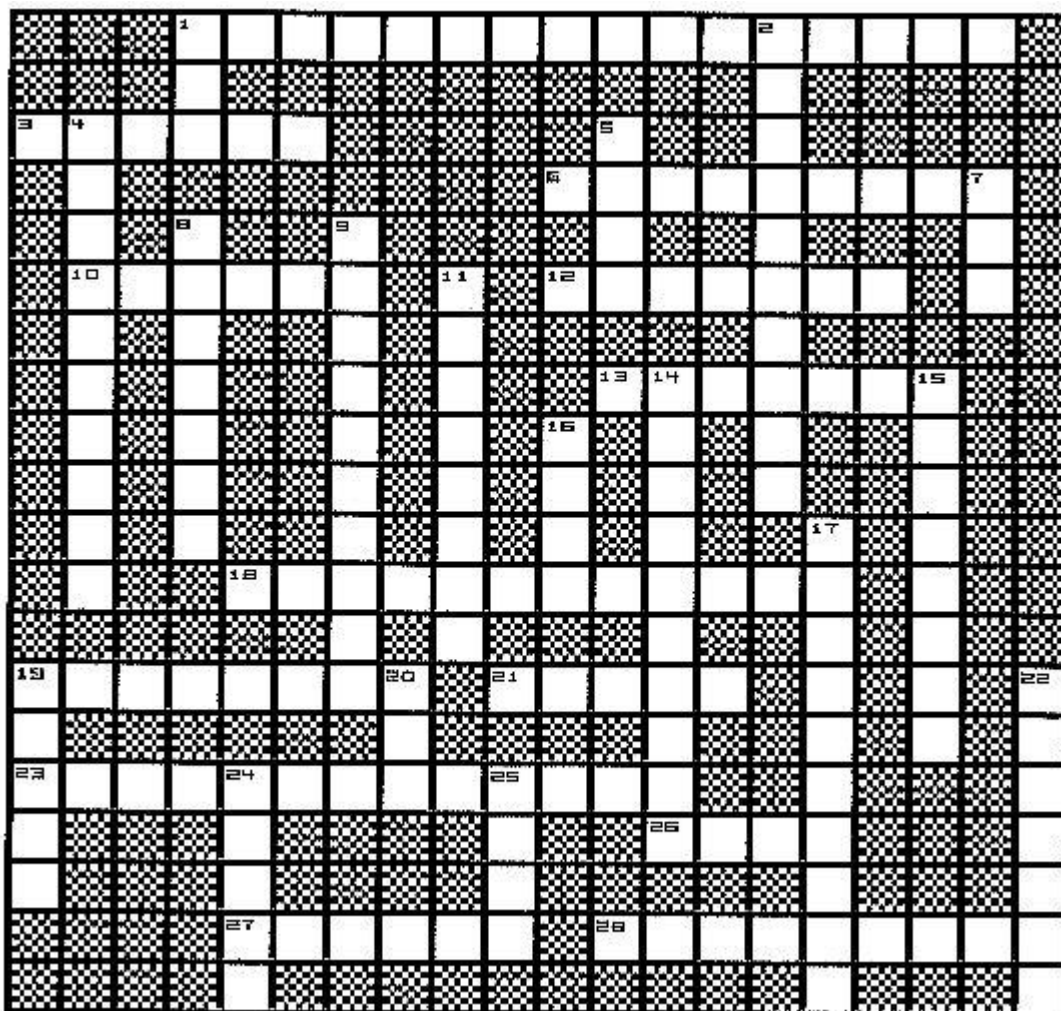


# SCIENTIFIC METHOD

Name \_\_\_\_\_

Due Date \_\_\_\_\_

## EAS-100-51: Earth Science



**ACROSS CLUES**

- 1. Orderly, logical plan of explaining natural phenomena by gathering and testing evidence.
- 3. Unlike religious dogma, scientific theories are subject to -----.
- 6. Meaning "forever unchanging" - something that doesn't apply to scientific theories.
- 10. A well-tested and supported hypothesis which can make predictions about phenomena.
- 12. To foretell the future.
- 13. The study of the natural universe.
- 18. The gathering of data using our own (or extensions of) our natural senses.
- 19. All that exists, in totality.
- 21. Unlike hearsay and folk wisdom, scientific theories are based upon actual happenings, or -----.
- 23. An inquiry into the causes of an event.
- 26. Determination of the validity of a hypothesis or theory.
- 27. "Catch-all" word for the universe (particularly on earth).
- 28. Naturally-occurring events.

**DOWN CLUES**

- 1. Earth's main source of heat and light.
- 2. A test designed to prove or disprove a hypothesis or theory, using a controlled environment.
- 4. The earth sciences are called ----- sciences in that the element of time is important.
- 5. The major reason for the rejection of science in the past (or even today).
- 7. Generalization about the behavior of nature (no known deviation after numerous experiments).
- 8. All theories are subject to ----- to determine their validity.
- 9. An initial explanation for natural phenomena, subject to further testing and observation.
- 11. A theory which unites many related subdisciplines or theories, i.e. plate tectonics.
- 14. In order to be predictable, nature must operate in a ----- fashion.
- 15. Observations or facts which support a hypothesis or theory.
- 16. Another expression for scientific observations or information.
- 17. A prior understanding or way of thinking (a "given").
- 19. Great scientific theories are praised for their ability to ----- different disciplines.
- 20. According to the Big Bang Theory, the Universe exploded from a cosmic ---.
- 22. A central assumption about the natural universe is that it works in a ----- and consistent manner.
- 24. A non-geologist's expression for a rock.
- 25. The most important element for the earth sciences is the ---- factor, required for most processes.