

## Ch 1 Intro to Earth Science Study Guide

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

1. Describe the different branches of earth science and what they study.
2. Describe the relationship between earth science and ecology.
3. Identify the Geosphere, hydrosphere, atmosphere biosphere, and ecosystem.
4. What is the significance of Ecology in the world today? What is the greatest threat to ecosystems today?
5. What steps have been taken to protect the environment?
6. What is the scientific method? Identify each of the steps of the scientific method.
7. What is observation? What is one of the most important means of gathering information?
8. What is a hypothesis? How is it tested?
9. Identify the parts of an experiment.
10. What is a conclusion? State how the results from an experiment can influence the hypothesis.
11. What is a theory? What is scientific law?
12. Describe what the bright-line spectrum is and how it is used to identify elements.
13. Describe the Doppler Effect and identify the change in the wavelength for energy moving away from and towards an observer.
14. What is a spectroscope used for?
15. Describe what the red shift is and what conclusion was reached from observations of the spectra?
16. Detail the different supporting evidences for the Big Bang Theory.