*Do not write on this paper.*

**Study Notes**

**Earth Science Test 1A – Radiometric Dating and Stars (Std 1/Obj 1a)**

1. In radiometric dating, scientists compare the proportion of a radioactive parent isotope to a stable daughter isotope.
2. Atoms of the same element that have different numbers of neutrons are called isotopes.
3. According to the Doppler Effect, if the spectrum of a star is red shifted, the star is moving away from you.
4. A half-life is the time it takes for half a sample of a radioactive isotope to decay.
5. Hydrogen and helium are the two most common elements in stars.
6. Blue stars are the hottest stars.
7. The absolute age of a geologic formation is the actual numeric age in years.
8. Radiometric dating is determining the age of a substance by comparison of the ratio of parent isotope to daughter isotope.
9. Red stars are the coldest stars.
10. A star is a ball of gas that gives off a tremendous amount of electromagnetic energy.
11. Radioactive dating is used to determine the absolute age of rocks because radioactive decay happens at a relatively constant rate.
12. Stars appear to move in circular paths through the sky (apparent movement) because Earth rotates on its axis.
13. If two stars have similar spectra, it could be said that they have the same composition and temperature.
14. Be able to solve half-life math problems similar to the ones on the half-life math handout we worked on in class.