



**ACROSS**

- 1 Star clusters are especially informative because all members (i.e. all of the stars) may be assumed to have, at least approximately, equal \_\_\_\_\_.
- 4 Galaxy spectral lines are \_\_\_\_\_ due to the expansion of the universe.
- 6 The number of civilizations which are capable of interstellar communication and which exist in our galaxy right now is \_\_\_\_\_.
- 7 During which season in Oklahoma is the earth closest to the sun?

**DOWN**

- 2 During the protostar stage, the energy to support a star comes primarily from \_\_\_\_\_.
- 3 In an atomic nucleus, protons are attracted to protons primarily by \_\_\_\_\_ force.
- 5 A magnetic field is necessary in the production of \_\_\_\_\_.
- 8 The stars whose planets have the greatest chance of harboring intelligent life are \_\_\_\_\_.
- 9 The planet with the hottest surface is \_\_\_\_\_.
- 11 First person who said that sun is the center of the solar system is, \_\_\_\_\_.

- 10 Why is the sky looks blue at day time?
- 14 Dry ocean beds of moon are called
- 16 Our Milky way galaxy belongs to \_\_\_\_\_ super cluster.
- 17 Light is absorbed and re-emitted with lower energy.
- 18 If you were sent to the moon to find some 4.5 billion years old rocks, where would you land your spaceship?
- 19 Most globular clusters are located in our galactic
- 20 The Milky Way is a \_\_\_\_\_ galaxy.
- 21 Our sun will ultimately become a \_\_\_\_\_
- 23 Jovian planets have much more volatile molecules (ammonia, methane, etc.) than \_\_\_\_\_ planets.
- 26 A star spends most of its lifetime in
- 31 Different colors focus at slightly different places. This is not a disadvantage of \_\_\_\_\_ telescopes.
- 32 \_\_\_\_\_ clusters contain oldest stars of the milky way
- 35 The famous equation which attempts to estimate the number of extraterrestrial civilizations in our galaxy with which we might come in contact.
- 12 Most meteorites come from
- 13 Universe is currently \_\_\_\_\_ its expansion.
- 15 According to Kepler's first law, planetary orbits are
- 19 More than \_\_\_\_\_ of the stars belong to binary systems.
- 22 "Twinkling" is a result of \_\_\_\_\_ of star light by atmosphere.
- 24 Type of stars that are useful in measuring stellar distances.
- 25 Center of \_\_\_\_\_ and Quasars show dramatic changes in their energy emission within a year or so.
- 27 According to the special theory of relativity, objects appear to \_\_\_\_\_ when they travel at high speeds.
- 28 Red giants are brighter than white dwarfs because they are
- 29 The polar caps on Mars are made of
- 30 A unit of measuring stellar distances.
- 33 Centaurus A, Cygnus A, and M87 (Virgo A) are \_\_\_\_\_ galaxies
- 34 Kepler came up with his laws by observing

Note: For a fee, you can use Crossword Weaver to print a nice copy of this puzzle (one that doesn't look like a web page). You can check it out for free by downloading the demo from [www.CrosswordWeaver.com](http://www.CrosswordWeaver.com).