

TEAM NUMBER _____

20. New stars are formed from
- A. supernova remnants.
 - B. activity in the centers of galaxies.
 - C. free space out of pure energy.
 - D. huge, cool dust and gas clouds.
21. Protostars are
- A. objects with masses less than about 0.08 solar mass, that do not have enough mass to become true stars.
 - B. stars made almost entirely out of protons.
 - C. very young objects, still contracting before becoming true stars.
 - D. old stars, contracting after using up all of their available hydrogen fuel.
22. From the location of a star on the H-R graph, the _____ is known.
- A. evolutionary history
 - B. mass and spectral type
 - C. chemical composition
 - D. luminosity and color
 - E. all of the above
23. All one solar mass stars stay on the main sequence, with that specific relationship of temperature and absolute magnitude, until the star runs out of hydrogen and the fusion of hydrogen nuclei to _____ nuclei stops.
- A. calcium
 - B. lithium
 - C. helium
 - D. uranium
24. All main sequence stars with a mass less than ~ 8 solar masses are sometimes referred to as _____ stars.
- A. stellar
 - B. giant
 - C. transient
 - D. dwarf
25. Type II Supernovas spectra
- A. show a non-ionized helium line at 587nm.
 - B. present a singly ionized silicon line at 615nm.
 - C. show lines of hydrogen.
 - D. are the same as Type I.
26. The first 26 supernovae of the year are designated with a capital letter from *A* to *Z*, for example, SN 1885A.
- The **367th supernova** found in the year 2005 would be written as _____. (2 points)