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## Zany Stars

Posted by MariaD - 2008/09/11 09:01

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Here is the description of the Zany Star activity and some examples from the Math Clubs where we ran it. I am thinking of creating software that will allow you to type the name, then prompt for each letter's word, and then automatically create the polygon - but you can move corners around and select little icons for corners, select connector colors (and be prompted to enter their meanings) and in general customize it. We will probably run it on the same drawing program that is now a part of MathLexicon. Please suggest some ideas for the applet!

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## Re:Zany Stars

Posted by MariaD - 2008/09/22 08:18

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I am now thinking of each letter as a star, and the resulting picture as a constellation. Here is a first sketch of the first step - constellation making:

<http://www.naturalmath.com/images/blog/zany-stars-sketch.jpg>

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## Re:Zany Stars

Posted by pandaphant - 2008/09/22 22:26

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Binary Star [http://www.wishfire.com/Gallery\\_2003/pix/binary-star-1152x864.jpg](http://www.wishfire.com/Gallery_2003/pix/binary-star-1152x864.jpg)

A binary star is a star system consisting of two stars orbiting around their center of mass. For each star, the other is its companion star. Recent research suggests that a large percentage of stars are part of systems with at least two stars. Binary star systems are very important in astrophysics, because observing their mutual orbits allows their mass to be determined. The masses of many single stars can then be determined by extrapolations made from the observation of binaries.

Red Dwarf [http://www.daviddarling.info/images/red\\_dwarf\\_art.jpg](http://www.daviddarling.info/images/red_dwarf_art.jpg)

a red dwarf star is a small and relatively cool star, of the main sequence, either late K or M spectral type. They constitute the vast majority of stars and have a mass of less than one-half that of the Sun (down to about 0.075 solar masses, which are brown dwarfs) and a surface temperature of less than 3,500 K.

White  
dwarf

[http://www.celestiamotherlode.net/catalog/images/screenshots/various/extrasolar\\_stars\\_White\\_Dwarf\\_Sirius\\_B\\_1\\_\\_Frank\\_Gregorio.jpg](http://www.celestiamotherlode.net/catalog/images/screenshots/various/extrasolar_stars_White_Dwarf_Sirius_B_1__Frank_Gregorio.jpg)

[http://www.nasa.gov/centers/goddard/images/content/207358main\\_whitedwarf\\_20080102\\_HI1.jpg](http://www.nasa.gov/centers/goddard/images/content/207358main_whitedwarf_20080102_HI1.jpg)

A white dwarf, also called a degenerate dwarf, is a small star composed mostly of electron-degenerate matter. As white dwarfs have mass comparable to the Sun's and their volume is comparable to the Earth's, they are very dense. Their faint luminosity comes from the emission of stored heat. They comprise roughly 6% of all known stars in the solar neighborhood.] The unusual faintness of white dwarfs was first recognized in 1910 by Henry Norris Russell, Edward Charles Pickering and Williamina Fleming; p. 1 the name white dwarf was coined by Willem Luyten in 1922.

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## Re:Zany Stars

Posted by pandaphant - 2008/09/22 22:52

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Hypernova

<http://www.armageddononline.org/image/1996-23-a-web.jpg>

Hypernova (pl. hypernovae) refers to an exceptionally large star that collapses at the end of its lifespan—for example, a collapsar, or a large supernova. Up until the 1990s, it had a more specific meaning to refer to an explosion with an energy of over 100 supernovae (10<sup>46</sup> joules).

Magnetar

<http://www.spacetoday.org/images/DeepSpace/MagnetarArt.jpg>

A magnetar is a neutron star with an extremely powerful magnetic field, the decay of which powers the emission of copious amounts of high-energy electromagnetic radiation, particularly X-rays and gamma-rays

Wolf-Rayet star

[http://nssdc.gsfc.nasa.gov/image/astro/hst\\_wolf-rayet\\_9838.jpg](http://nssdc.gsfc.nasa.gov/image/astro/hst_wolf-rayet_9838.jpg)

Wolf-Rayet stars (often referred to as WR stars) are evolved, massive stars (over 20 solar masses), which are losing

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mass rapidly by means of a very strong stellar wind, with speeds up to 2000 km/s.

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