

get your clicker and answer these:



L&D: The life and, mostly,
death of stars continued...



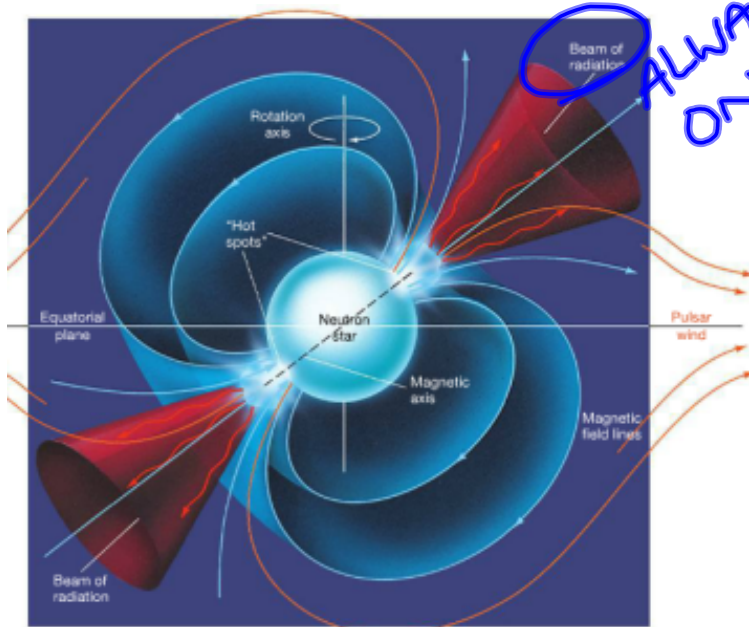
- 1) An object more massive than the Sun, but roughly the size of a city, is a
 - A) white dwarf.
 - B) brown dwarf.
 - C) red dwarf.
 - D) black dwarf.
 - E) neutron star.

- 2) In a neutron star, the core is
 - A) primarily iron and silicon.
 - B) made of compressed neutrons in contact with each other.
 - C) electrons and protons packed so tightly they are in contact.
 - D) constantly expanding and contracting.
 - E) no longer rotating.

- 3) Which of these evolutionary paths is the fate of our Sun?
 - A) planetary nebula
 - B) supernova of Type II
 - C) brown dwarf
 - D) pulsar
 - E) nova

- 4) The clouds of gas and dust that form stars are composed mainly of
 - A) ammonia, methane, and water vapor.
 - B) only hydrogen.
 - C) some hydrogen, but mainly carbon dioxide.
 - D) 90% hydrogen, 9% helium by weight.
 - E) 10% hydrogen, 90% helium by numbers of atoms.

Loza: Describe the nature and origin of pulsars.



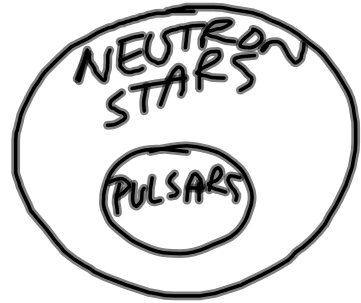
ALWAYS ON

NEUTRON STARS

- SPIN QUICKLY
- HAVE STRONG MAGNETIC FIELDS

DISCOVERED BY
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- PULSING OBJECTS
- PULSE? RADIOWAVES
- ALL PULSARS ARE NEUTRON STARS BUT NOT ALL N.S. ARE PULSARS



"LIGHTHOUSE MODEL"

LOG IN & GOOGLE

"BUILD A STAR"

LOW MASS \rightarrow WHITE DWARF

MEDIUM MASS \rightarrow NEUTRON STAR

HIGH MASS \rightarrow BLACK HOLE

FIND DIVIDING LINE BETWEEN THESE

IF $m < \underline{\quad}$ THEN STAR \rightarrow W.D.

IF $\underline{\quad} < m < \underline{\quad}$ THEN \rightarrow N.S.

IF $m > \underline{\quad}$ \rightarrow BLACK HOLE