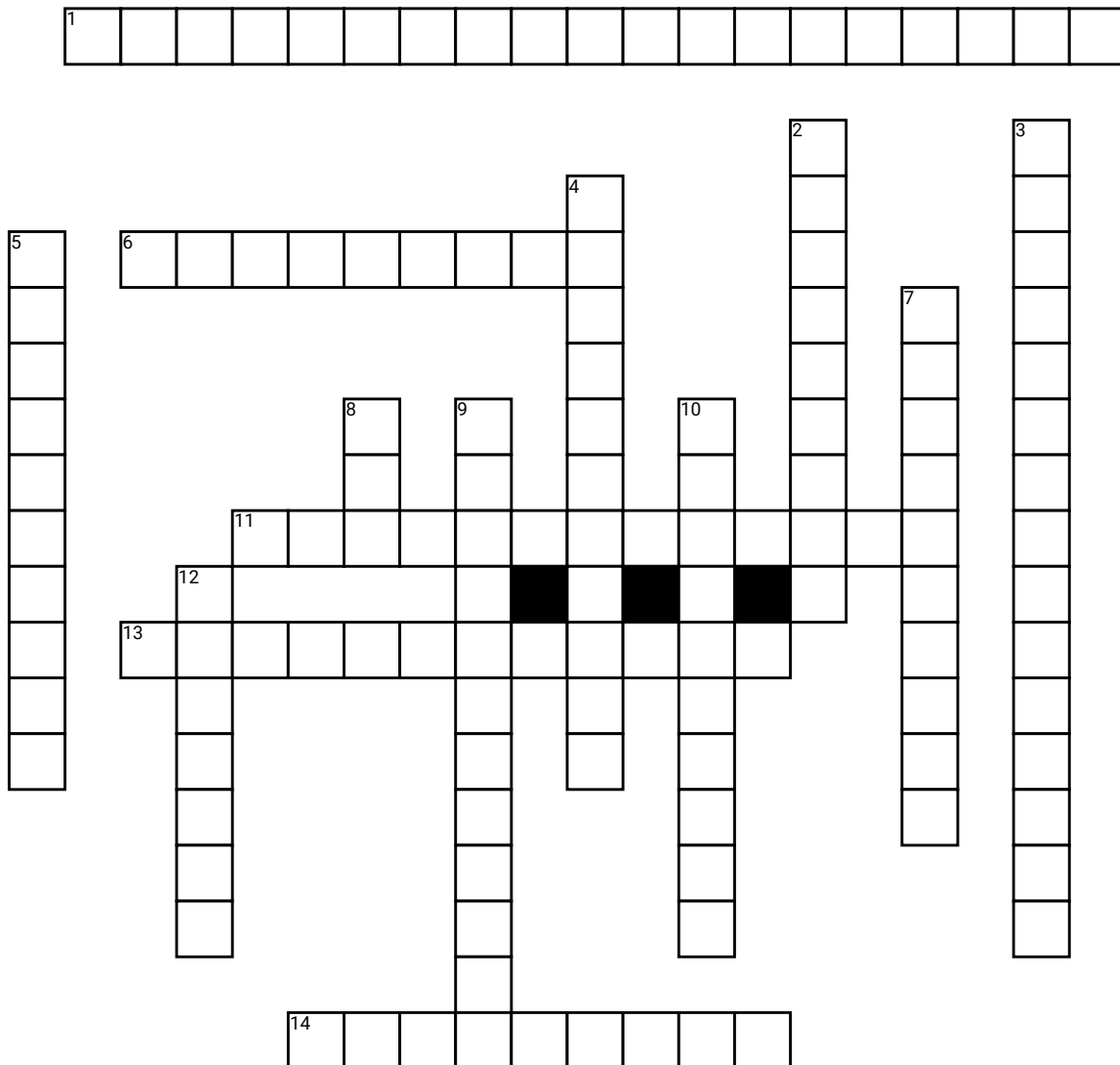


Stellar Evolution



Across

- 1. The portion of the giant branch before helium ignition occurs in the course of stellar evolution
- 6. A region of space having a gravitational field so intense that no matter or radiation can escape
- 11. A star that is brighter than a normal main sequence star of the same spectral class, but not as bright as giant stars
- 13. The smallest, coolest, and dimmest main sequence stars and orange, red, or brown in color
- 14. A star that suddenly increases gently in brightness because of a catastrophic explosion that ejects most of its mass

Down

- 2. A contracting mass of gas which represents an early stage in the formation of a star, before nucleosynthesis has begun
- 3. The region of the Hertzsprung-Russell diagram occupied by evolved stars of low mass and low metallicity during their central Helium burning phase
- 4. A celestial object of very small radius and very high density, composed predominantly of closely packed neutrons
- 5. A celestial object intermediate in size between a giant planet and a small star, believed to emit mainly infrared radiation

- 7. Formed when a low-mass star has exhausted all its central nuclear fuel and lost its outer layers as a planetary nebula
- 8. A region of the Hertzsprung-Russell diagram populated by evolved cool luminous stars
- 9. A continuous and distinctive band of stars that appears on plots of stellar color versus brightness
- 10. A very large star that is even brighter than a giant, often despite being relatively cool
- 12. A transient phase between the AGB and planetary nebula phases of stellar evolution