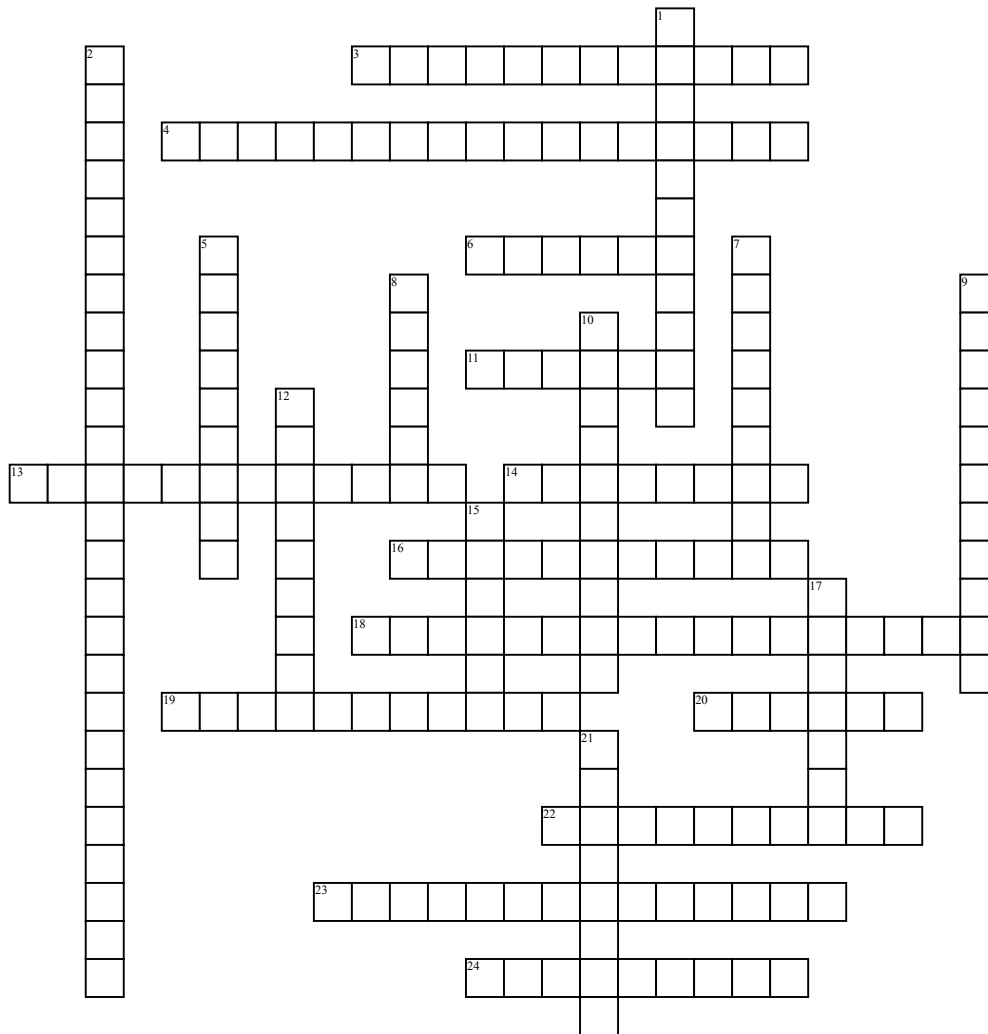


Lifespan of the Sun



Across

- 3. Region in the Hertzsprung- Russell diagram that most stars occupy
- 4. How bright a star appears
- 6. Combination of lightweight, atomic nuclei into heavier nuclei
- 11. Cloud of interstellar gas and dust
- 13. Is only visible during a solar eclipse when the photosphere is blocked
- 14. Dark spots on the surface of the photosphere
- 16. Visible surface of the sun
- 18. How bright a star would appear if placed at a distance of 10 pc

- 19. Two stars gravitationally bound together
- 20. Unit of measure, larger than a light year
- 22. An arc of gas that is ejected from the chromosphere
- 23. Patterns of stars
- 24. Charged particles that flow throughout the solar system

Down

- 1. A collapsed star remnant
- 2. A graph that shows the relationships of mass, luminosity, temperature and diameter

- 5. An extremely dense object that remains after a supernova
- 7. Center of a star formation
- 8. A pulsating star
- 9. Violent eruptions of particles and radiation from the surface of the sun
- 10. Energy output from the surface of a star
- 12. Massive explosion of a star
- 15. Outer most layer of the sun's atmosphere
- 17. Splitting of heavy atomic nuclei into smaller lighter nuclei
- 21. Shift of position caused by the motion of observer

Word Bank

- | | | | |
|-----------------------------|--------------------|--------------|---------------|
| Hertzsprung-Russell diagram | absolute magnitude | neutron star | parsec |
| apparent magnitude | supernova | photosphere | main sequence |
| pulsar | binary stars | fission | prominence |
| solar wind | black hole | chromosphere | fusion |
| parallax | protostar | sunspots | corona |
| luminosity | constellations | nebula | solar flares |