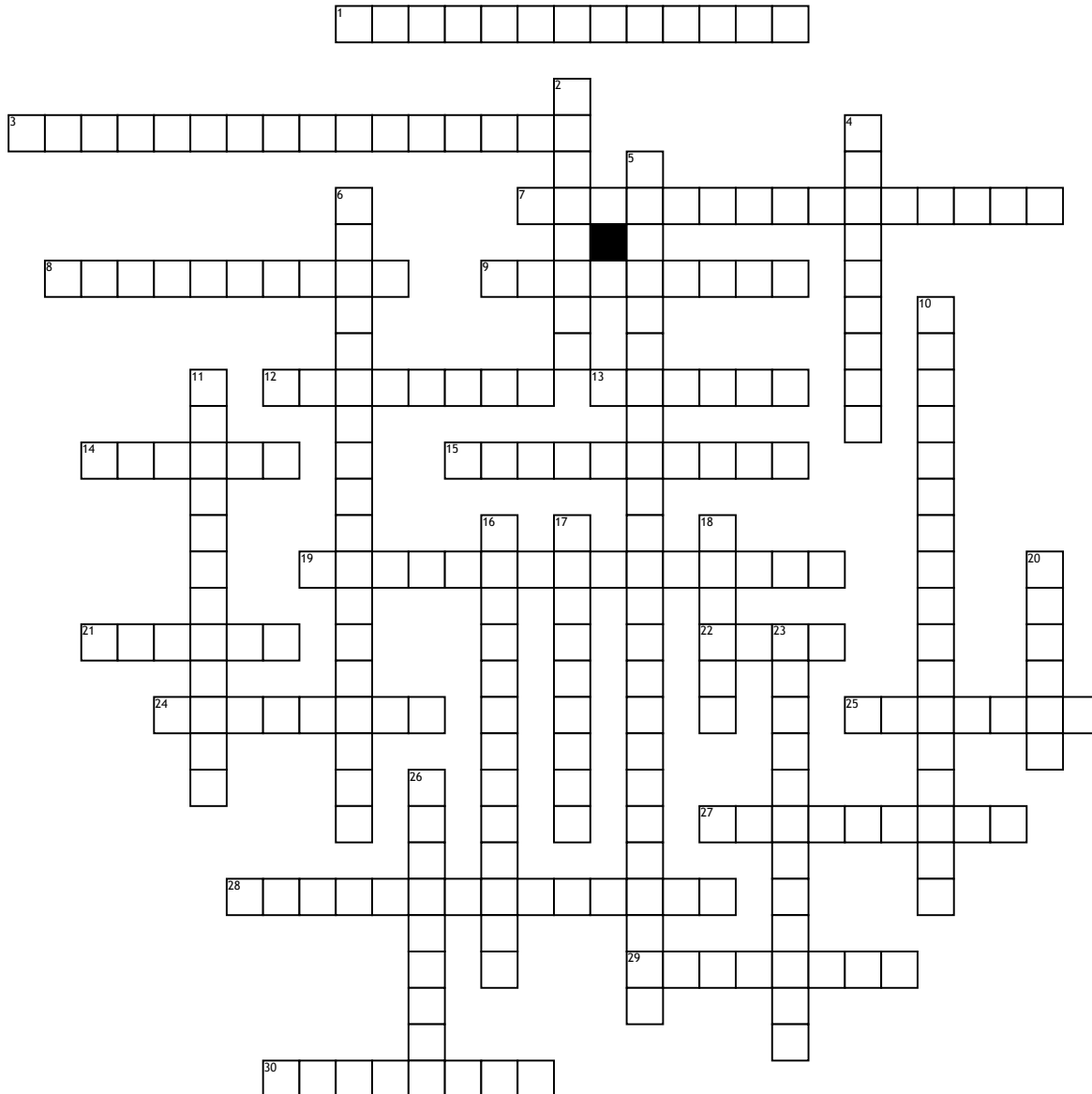


Astronomy



Across

1. Is an aging giant star that has consumed its cores supply of hydrogen fuel
 3. is a type of galaxy having an approximately ellipsoidal shape and a smooth, nearly featureless brightness profile.
 7. is a galaxy that does not have a distinct regular shape
 8. A small very dense star that is typically the size of a planet
 9. Distance light travels in 1 yr
 12. the displacement of spectral lines towards longer wavelengths (the red end of the spectrum) in radiation from distant galaxies and celestial objects
 13. the point or place where something begins, arises, or is derived.
 14. The process or result of joining two or more things together to form a single entity
 15. An expert in or student of astronomy
 19. Are intrinsic variables which pulsate in a predictable way
 21. a system of millions or billions of stars, together with gas and dust, held together by gravitational attraction
 22. A fixed luminous point in the night sky which is large, remote incandescent body like the sun
 24. is a displacement or difference in the apparent position of an object viewed along two different lines of sight, and is measured by the angle or semi-angle of inclination between those two lines.

25. Is a chemical element with symbol Li and atomic number 3
 27. a star that suddenly increases greatly in brightness because of a catastrophic explosion that ejects most of its mass.
 28. a proportionality constant indicative of the rate of expansion of the universe that is used in relating the apparent velocity of recession of a distant galaxy and its distance.
 29. A very large star of high luminosity and low surface temperature
 30. All existing matter and space considered as a whole
Down
 2. A chemical element with chemical symbol H and atomic number 4
 4. The great size or extent of something
 5. Is a scatter plot of stars showing the relationship between stars
 6. is a spiral galaxy with a central bar-shaped structure composed of stars
 10. a theory in which the universe is assumed to have average properties that are constant in space and time so that new matter must be continuously and spontaneously created to maintain average densities as the universe expands
 11. a galaxy in which the stars and gas clouds are concentrated mainly in one or more spiral arms.

16. Is an effort to explain what happened at the beginning of our universe
 17. The process by which different kinds of living organisms are believed to have developed from earlier forms during the history of the earth
 18. Is a unit of length used to measure large distances to objects outside the solar system
 20. Is a chemical element with symbol He and atomic number 2
 23. is the branch of astronomy that employs the principles of physics and chemistry to ascertain the nature of the heavenly bodies, rather than their positions or motions in space.
 26. An objective with a long focal length and an eyepiece with a short focal length, usually used for observing celestial bodies