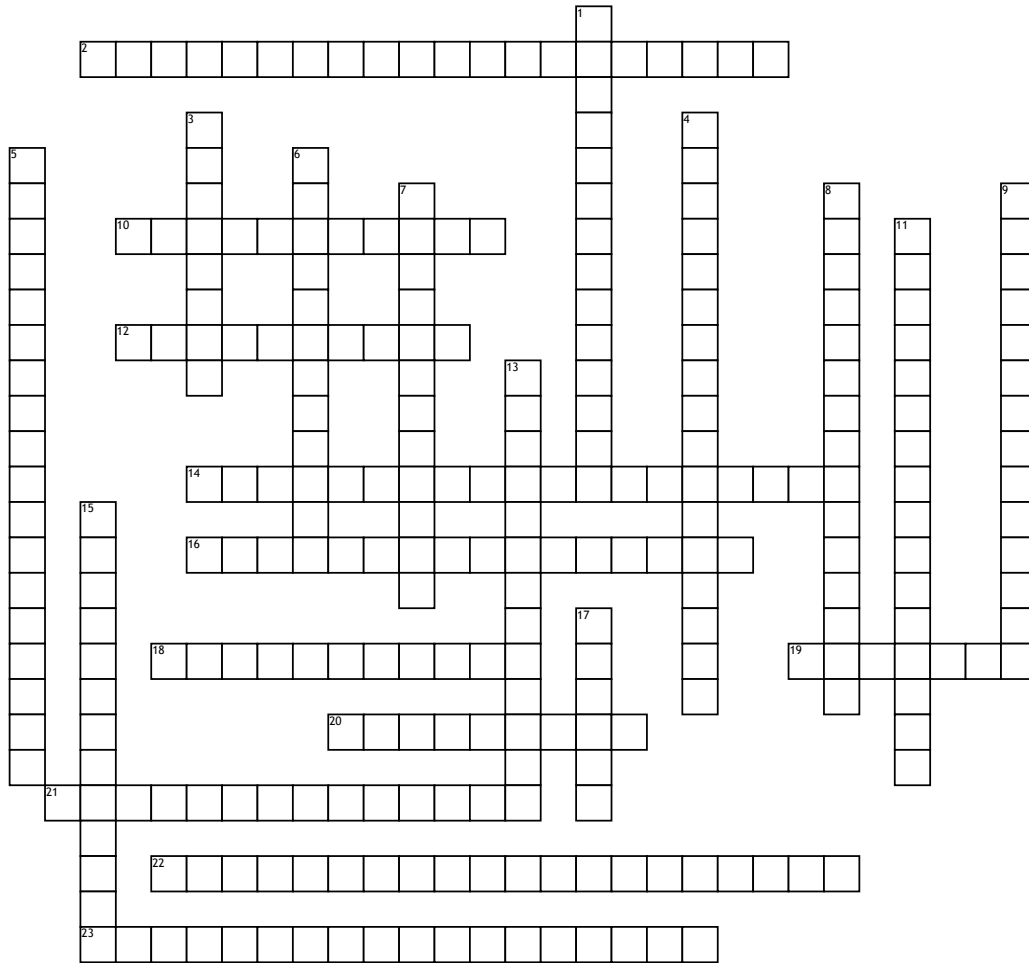


Name: \_\_\_\_\_

# Astronomy Vocab



**Across**

- 2. a distribution of matter between a distant light source and an observer.
- 10. The unobserved matter required for the observed rotation of most galaxies to be consistent with their masses as inferred from luminous matter.
- 12. a hypothetical form of matter that is thought to account for approximately 85% of the matter in the universe.
- 14. an empirical relationship between the mass or intrinsic luminosity of a spiral galaxy and its asymptotic rotation velocity or emission line width.
- 16. it emits no light of its own.
- 18. type of galaxy which is intermediate between an elliptical galaxy and a spiral galaxy in galaxy morphological classification schemes.
- 19. extremely luminous and were first identified as being high redshift sources of electromagnetic energy, including radio waves and visible light.
- 20. the observation in physical cosmology that: Objects observed in deep space—extragalactic space, 10 megaparsecs (Mpc) or more—are found to have a redshift.

- 21. galaxies that have a small core of emission embedded at the center of an otherwise typical galaxy.
- 22. a morphological classification scheme for galaxies invented by Edwin Hubble in 1926.
- 23. a type of galaxy having an approximately ellipsoidal shape and a smooth, nearly featureless brightness profile.

**Down**

- 1. a cluster of galaxies which themselves occur as clusters.
- 3. a spherical collection of stars that orbits a galaxy in the galactic plane.
- 4. a galaxy that does not have a distinct regular shape, unlike a spiral or an elliptical galaxy.
- 5. a slowly rotating spiral structure (just as the traffic density wave that moves slowly down the road).
- 6. an extended bulge of stars that is nearly spherical in shape.
- 7. a spiral galaxy with a central bar-shaped structure composed of stars.

- 8. a compact region at the center of a galaxy that has a much higher than normal luminosity over at least some portion of the electromagnetic spectrum with characteristics indicating that the luminosity is not produced by stars.
- 9. a galaxy in which the stars and gas clouds are concentrated mainly in one or more spiral arms.
- 11. A type of galaxy cluster that has an overall amorphous appearance, usually showing little overall symmetry or central concentration.
- 13. a cluster of galaxies which themselves occur as clusters.
- 15. a plot of the orbital speeds of visible stars or gas in that galaxy versus their radial distance from that galaxy's centre.
- 17. a system of millions or billions of stars, together with gas and dust, held together by gravitational attraction.

**Word Bank**

- |                       |                   |                       |                     |                       |
|-----------------------|-------------------|-----------------------|---------------------|-----------------------|
| Tully-Fisher Relation | Barred Spiral     | Hubble Classification | Dark Matter         | Rotation Curve        |
| Lenticulars           | Intergalactic Gas | Hubble Law            | Irregular Cluster   | Clusters              |
| Active Galaxies       | Quasars           | Galactic Nucleus      | Elliptical Galaxies | Gravitational Lensing |
| Central Bulge         | Regular Cluster   | Galaxy                | Spiral Galaxies     | Irregular Galaxies    |
| Spiral Density Waves  | Missing Mass      | Superclusters         |                     |                       |