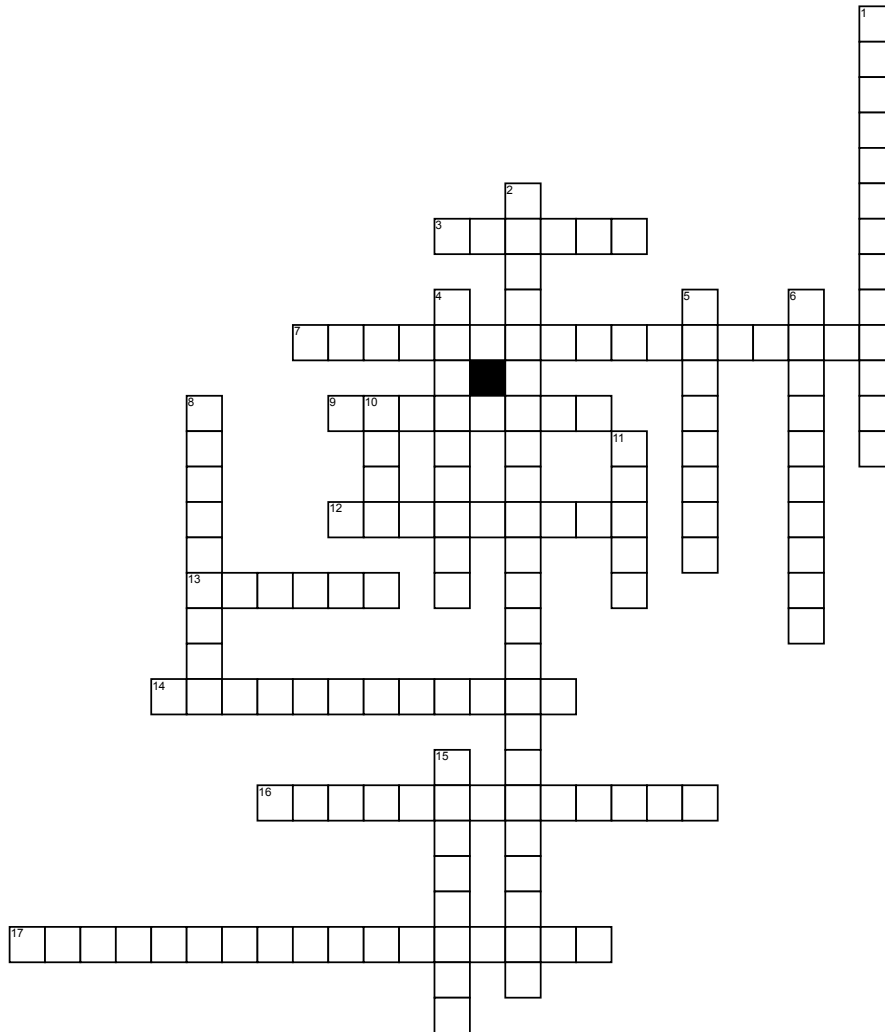


Astronomy crossword



Across

- 3. A system of millions or billions of orbiting stars together with gas and dust, held together by gravitational attraction.
- 7. The magnitude of a celestial object as it would be seen at a standard distance of 10 parsecs.
- 9. A small, rocky body orbiting the sun. Many of these are found (as the asteroid belt) especially between the orbits of Mars and Jupiter, and some pass close to the Earth or enter the atmosphere as meteors.
- 12. A scatter plot of stars showing the relationship between the stars' absolute magnitudes versus their stellar classifications or effective temperatures.
- 13. A cloud of gas and dust in outer space, visible in the night sky either as an indistinct bright patch or as a dark silhouette against other luminous matter.

- 14. A series of star types to which most stars belong, represented on an HR diagram a continuous band extending from the upper left (hot and bright) to the lower right (cool and dim).
- 16. An increase (or decrease) in the frequency of sound, light, or other waves as the source and observer more toward (or away from) each other.
- 17. The magnitude of a celestial object as it is actually measured from the Earth.

Down

- 1. A theory that the universe may have been created in a huge explosion at least 12 billion years ago.
- 2. The range of wavelengths or frequencies over which electromagnetic radiation extends.
- 4. the displacement of the spectrum to shorter wavelengths in the light coming from distant celestial objects moving toward the observer.

- 5. All existing matter and space considered as a whole; the cosmos.
- 6. The intrinsic brightness of a celestial object (as distinct from its apparent brightness diminished by distance.)
- 8. A star that suddenly increases greatly in brightness because of a catastrophic explosion that ejects most of its mass.
- 10. A fixed luminous point in the night sky that is a large, remote incandescent body like the sun.
- 11. A celestial object consisting of a nucleus of ice dust and, when near the sun, a "tail" of gas and dust particles pointing away from the sun.
- 15. The displacement of spectral lines toward lower wavelengths in radiation from distant galaxies and celestial objects.

Word Bank

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|-----------------|---------------|--------------------------|--------------------|
| HR diagram | main sequence | blue shift | galaxy |
| nebula | red shift | absolute magnitude | Apparent magnitude |
| big bang theory | asteroid | electromagnetic spectrum | comet |
| luminosity | star | universe | supernova |
| doppler effect | | | |