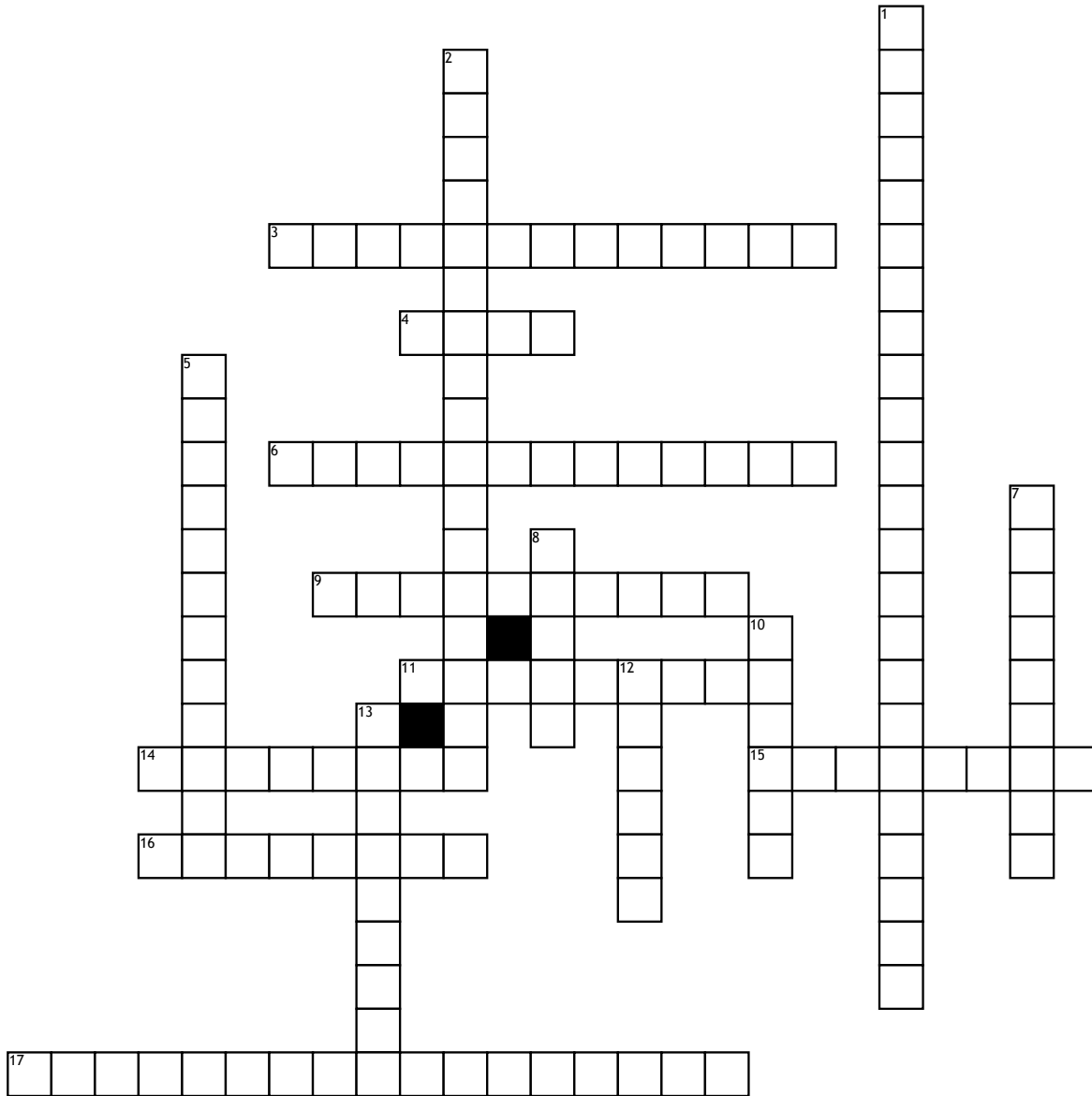


IPC Space Crossword Puzzle



Across

- 3. an increase (or decrease) in the frequency of sound, light, or other waves as the source and observer move toward (or away from) each other. The effect causes the sudden change in pitch noticeable in a passing siren, as well as the redshift seen by astronomers.
- 4. a fixed luminous point in the night sky that is a large, remote incandescent body like the sun
- 6. theory that the universe may have been created in a huge explosion at least 12 billion years ago
- 9. the intrinsic brightness of a celestial object
- 11. a star that suddenly increases greatly in brightness because of a catastrophic explosion that ejects most of its mass.

- 14. all existing matter and space considered as a whole; the cosmos
- 15. a small rocky body orbiting the sun.
- 16. the displacement of spectral lines toward longer wavelengths
- 17. the brightness of a celestial object as it is actually measured from the earth.

Down

- 1. the range of wavelengths or frequencies over which electromagnetic radiation extends.
- 2. the brightness of a celestial object as it would be seen at a standard distance of 10 parsecs.
- 5. a series of star types to which most stars belong to
- 7. the displacement of the spectrum to shorter wavelengths in the light coming from distant celestial objects moving toward the observer
- 8. the displacement of the spectrum to shorter wavelengths in the light coming from distant celestial objects moving toward the observer
- 10. a system of millions or billions of stars, together with gas and dust, held together by gravitational attraction.
- 12. 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.
- 13. a scatter plot of stars showing the relationship between the stars' absolute magnitudes or luminosities versus their stellar classifications or effective temperatures