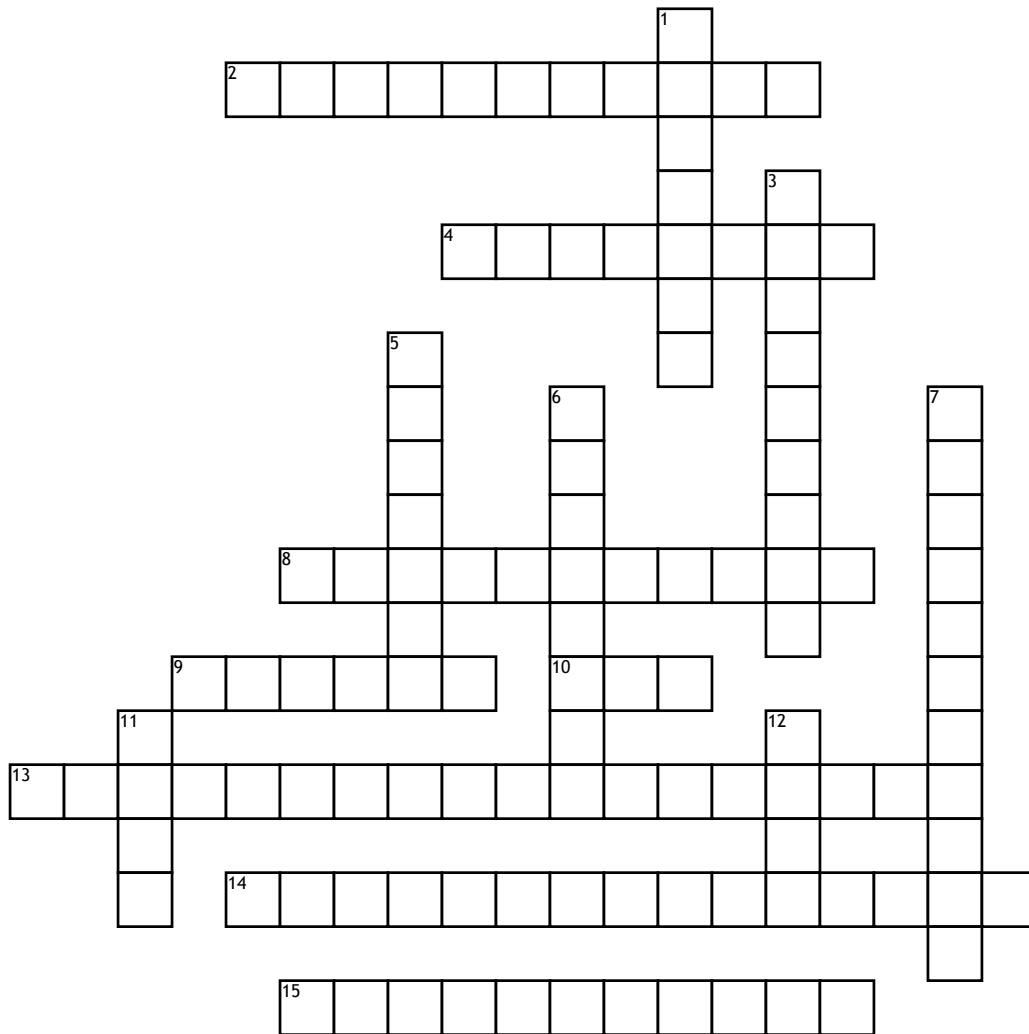


Astronomy Vocabulary Tic tac toe



Across

- 2. orbital period squared = (a ratio of) the longest radius of the orbit cubed.
- 4. The plane of Earth's orbit about the Sun.
- 8. The line connecting the Sun to a planet sweeps equal areas in equal times.
- 9. A word used for any kind of stuff which contains mass.
- 10. One of the three states of matter, in which atoms, molecules, or ions move freely and are not bound to each other. In astronomy, it usually refers to hydrogen or helium.
- 13. a wavelike bending of space generated by the acceleration of massive bodies

- 14. a planet's orbit has an ellipse shape that travels around one star
- 15. English cleric and scientist; discovered the classical laws of motion and gravity

Down

- 1. Oval. That the orbits of the planets are ellipses, not circles, was first discovered by Johannes Johannes Kepler the careful observations by Tycho Brahe
- 3. magnetic field
- 5. When one planet, star, or shadow crosses in-front of another, cutting off the light from the second body (e.g. an eclipse of the sun by the moon, or one star in a binary system eclipsing the other).

- 6. The lightest and most abundant element. A hydrogen atom consists of one proton and one electron. Hydrogen composes about 75% of the mass of the Sun, but only a tiny fraction of the Earth.
- 7. The imploded core of a massive star produced by a supernova explosion
- 11. The National Aeronautics and Space Administration, founded in 1958 as the successor to the National Advisory Committee for Aeronautics.
- 12. A measure of the total amount of material in a body

Word Bank

- | | | | |
|--------------------|----------------|----------------|---------------------|
| matter | ellipse | light year | gravitational waves |
| ecliptic | gas | Kepler's 2 law | mass |
| Kepler's first law | Isaac Newton | eclipse | hydrogen |
| NASA | Kepler's 3 law | neutron star | |