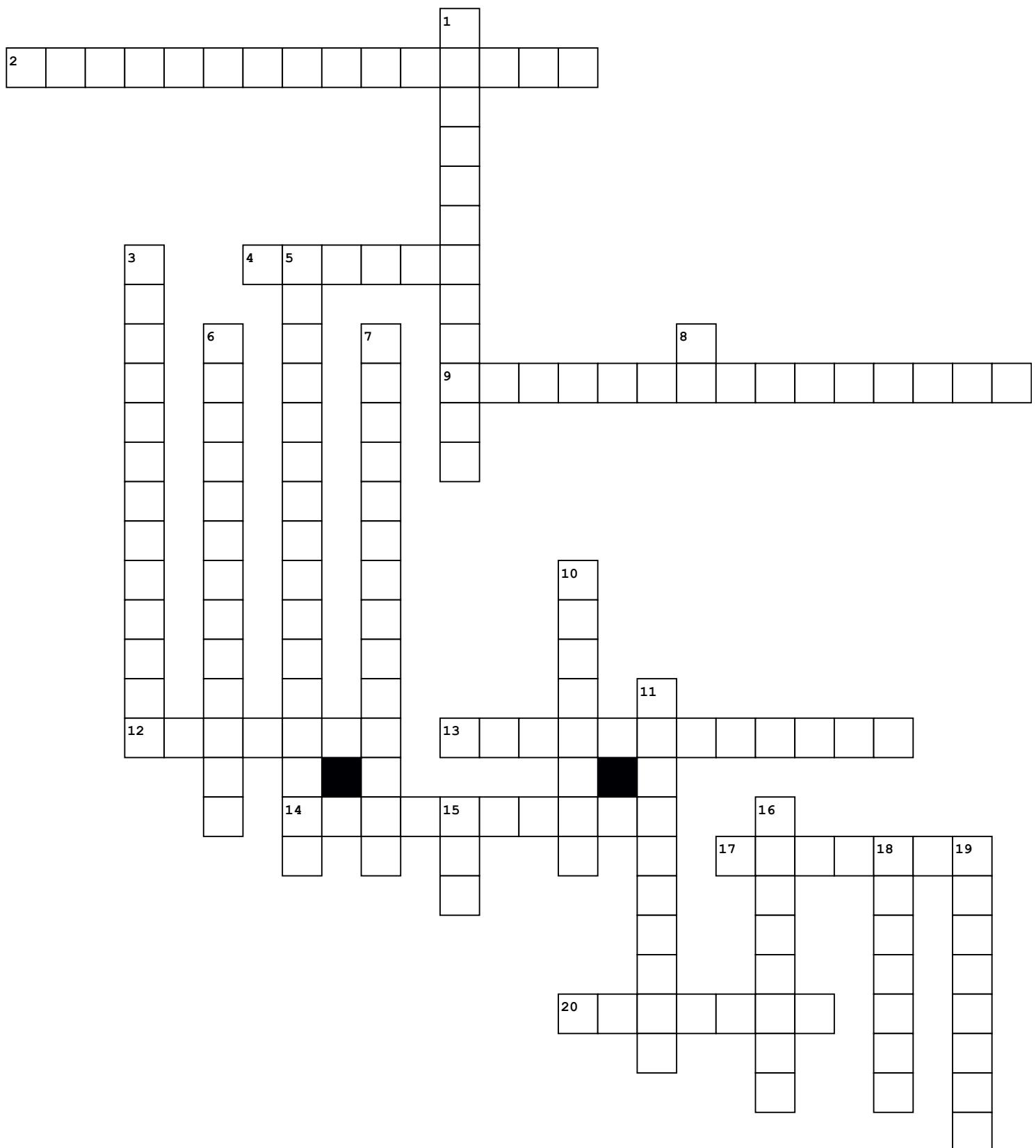


# Nuclear Chemistry



Across

Down

- 2. A process that changes the composition of the nucleus of an atom.
- 4. A positively charged subatomic particle
- 9. The collection of stable nuclei that fall within a narrow band on a plot of the number of neutrons
- 12. The small, dense, positively charged core of an atom.
- 13. A high-energy electron with a -1 charge
- 14. Weighted average of the masses of all isotopes of an element.
- 17. A nucleus of a specific isotope of an element
- 20. A subatomic particle with the mass equal to a proton but with no electrical charge
- 1. The number of protons in the nucleus of an atom of an element
- 3. The process in which two or more nuclei combine to form a larger nucleus
- 5. The spontaneous breakdown of an unstable nucleus to a stable nucleus.
- 6. A helium nucleus consisting of two protons and two neutrons
- 7. The process in which an atomic nucleus splits into two or more large fragments
- 8. the number of protons.
- 10. A high-energy form of electromagnetic
- 11. The sum of the neutrons and protons in a nucleus of an atom.
- 15. an atom or group of combined atoms that has a charge because of the loss or gain of electrons
- 16. Subatomic particles ( protons & neutrons ) in the nucleus of an atom.
- 18. Any of two or more atoms of an element that are chemically alike but have different masses.
- 19. A negatively charged particle.