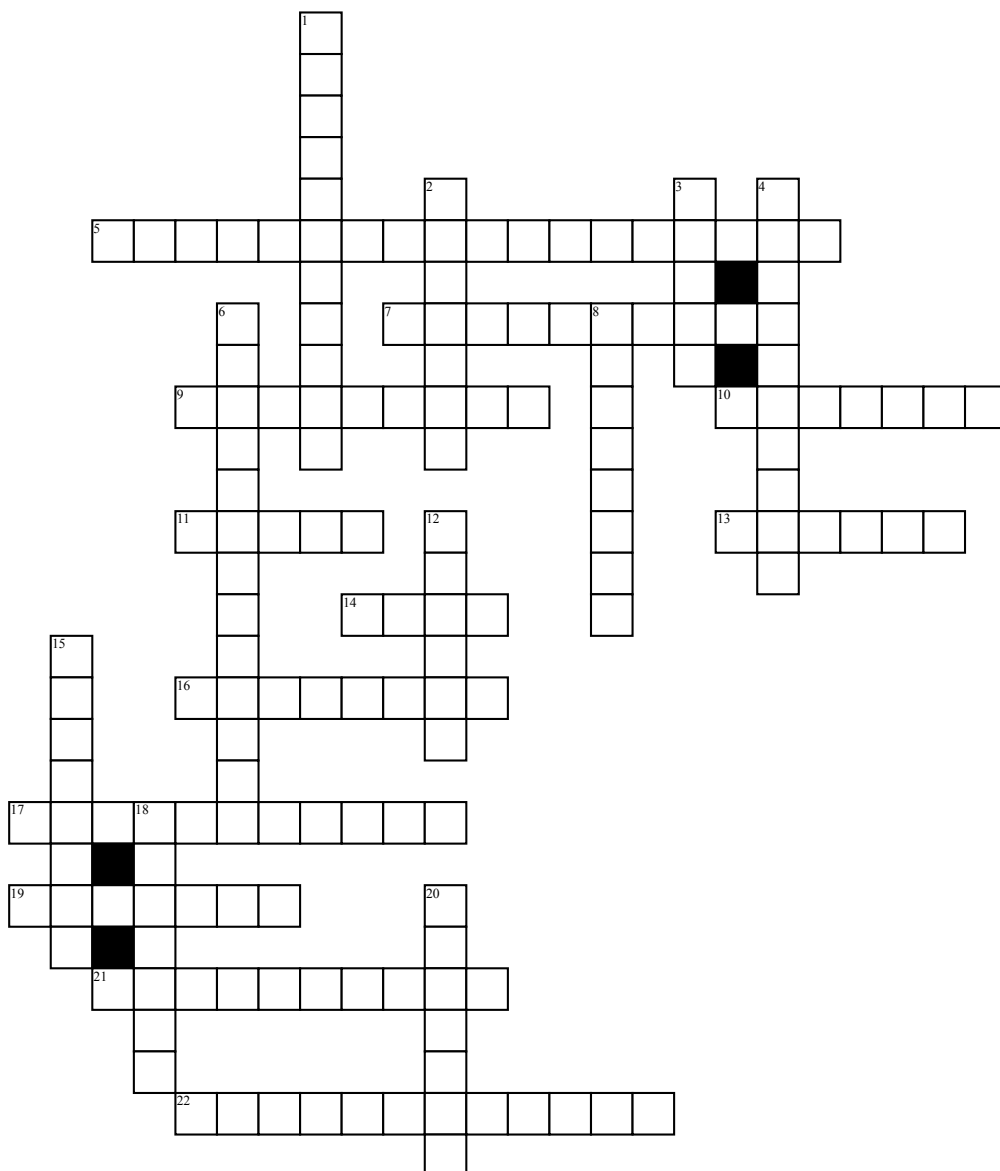


# Atoms and the Periodic Table Vocabulary



## Across

5. the elements in Group 2 of the periodic table; they are reactive metals, but are less reactive than alkali metals; their atoms have two electrons in their outer level
7. the weighted average of the masses of all the naturally occurring isotopes of an element
9. elements that have two properties of both metals and nonmetals; sometimes referred to as semiconductors
10. the tiny, extremely dense, positively charged region in the center of an atom; made up of protons and neutrons
11. a column of elements on the periodic table
13. a horizontal row of elements on the periodic table
14. the smallest particle into which an element can be divided and still be the same substance

16. the negatively charged particles found in all atoms; they are involved in the formation of chemical bonds

17. the law that states that the chemical and physical properties of elements are periodic functions of their atomic numbers

19. the elements in Group 17 of the periodic table; they are very reactive nonmetals, and their atoms have seven electrons in their outer level

21. the unreactive elements in Group 18 of the periodic table; their atoms have eight electrons in their outer level

22. the number of protons in the nucleus of an atom

## Down

1. the elements in Group 1 of the periodic table; they are the most reactive metals, their atoms have one electron in their outer level

2. the particles of the nucleus that have no charge

3. elements that are shiny and are good conductors of thermal energy and electric current; most of them are malleable and ductile

4. the sum of the protons and neutrons in an atom

6. the regions inside an atom where electrons are likely to be found

8. a pure substance composed of two or more elements that are chemically combined

12. the positively charged particles of the nucleus; the number of this particle in a nucleus is the atomic number that determines the identity of a substance

15. elements that are dull and are poor conductors of thermal energy and electric current

18. atom that have the same number of protons, but have different numbers of neutrons

20. a pure substance that cannot be separated or broken down into simpler substances by physical or chemical means