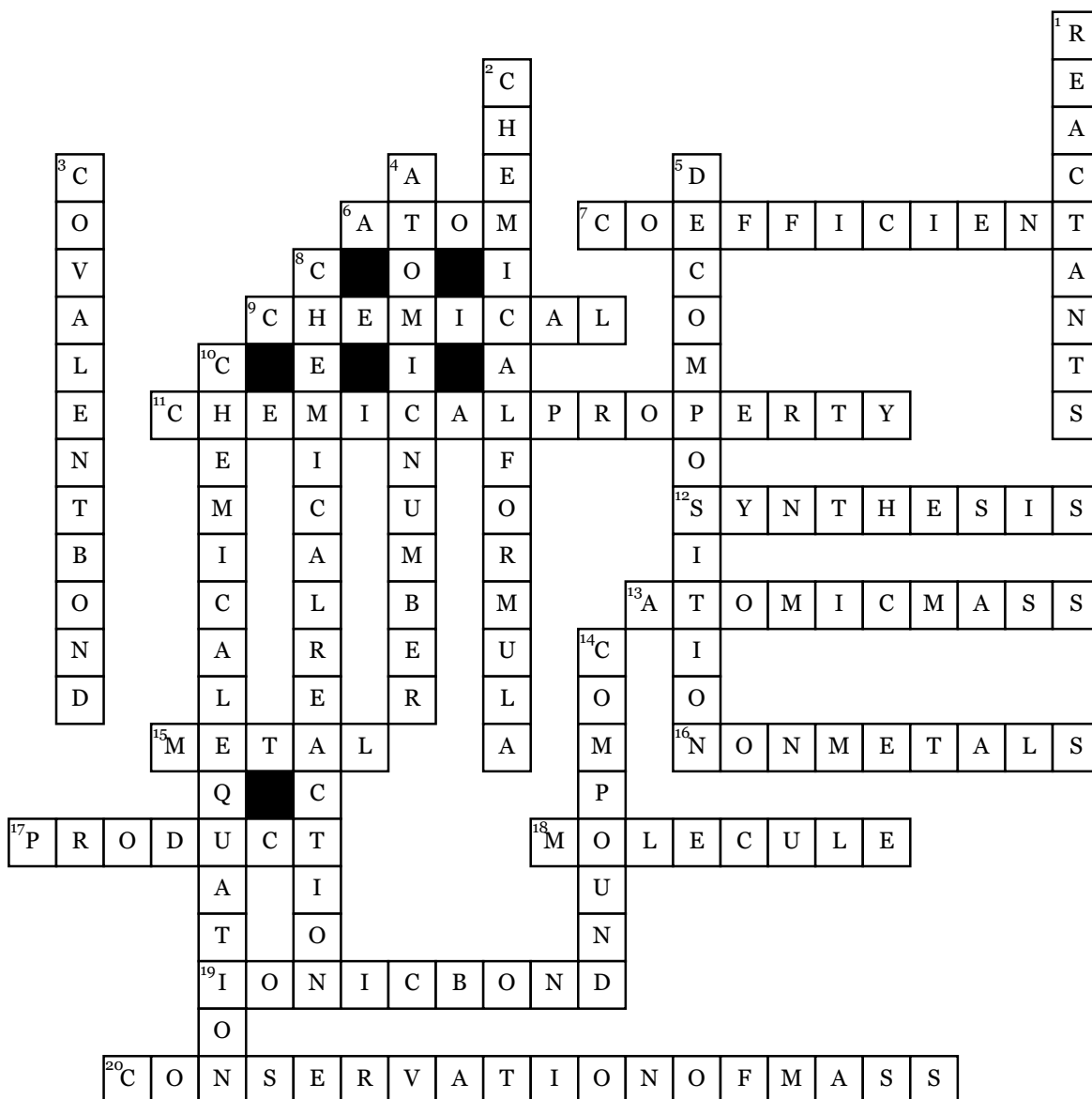


# The Amazing Elements



## Across

6. the smallest piece of an element that still represents that element
7. A number placed in front of an element symbol or a chemical formula in a equation
9. The simplest form of a pure substances that cannot be broken down into any other substances by chemical means
11. Characteristics of a chemical and how the molecules that make up the substance can be rearranged or combined with other substances
12. A type of chemical reaction in which two or more substances combine and form one compound
13. The mass of an atom of a chemical element expressed in atomic mass units. It is approximately equivalent to the number of protons and neutrons in the atom

15. Shiny, high melting point, good conductors, ductile

16. Dull, brittle, non conductors, and low melting point

17. A substance produced by a chemical reaction

18. Two or more atoms that are held together by covalent bonds and act as a unit

19. The attraction between positively and negatively charged ions in an ionic compound

20. A principle stating that the total momentum of a group of objects stays the same unless outside forces act on objects

## Down

1. A starting substance in a chemical in a chemical reaction

2. A group of chemical symbols and numbers that represents the elements and the number of atoms of each element that makes up a compound

3. A chemical bond formed when two atoms share one or more pairs of valence electrons

4. The number of protons in the nucleus of an atom, which determines the chemical properties of an element and its place in the periodic table

5. A type of chemical reaction in which one compound breaks down and forms two or one elements

8. A process in which atoms of one or more substances rearranged to form one or more new substances

10. A description of a reaction using element symbols and chemical formulas

14. Pure substances that are chemical unions of positive elements