

Name \_\_\_\_\_

## Organization of the Table Answer Key

1. The periodic table is organized based on the increasing atomic number of elements.
2. An element's atomic number represents the number of protons in the nucleus of its atoms.
3. Periods are the rows of elements in the periodic table. There are seven periods in total.
4. There are 18 groups (or columns) in the periodic table.
5. The group number indicates the number of valence electrons an element has.
6. Valence electrons are the electrons in the outermost energy level (or shell) of an atom.
7. Elements within a group share similar chemical properties due to having the same number of valence electrons.
8. A period is a horizontal row, whereas a group is a vertical column in the periodic table.
9. Metals are generally found on the left side of the periodic table, nonmetals on the right side, and metalloids along the zigzag line.
10. The periodic table provides a systematic way to organize and understand the properties and relationships of elements, making it a fundamental tool in chemistry.