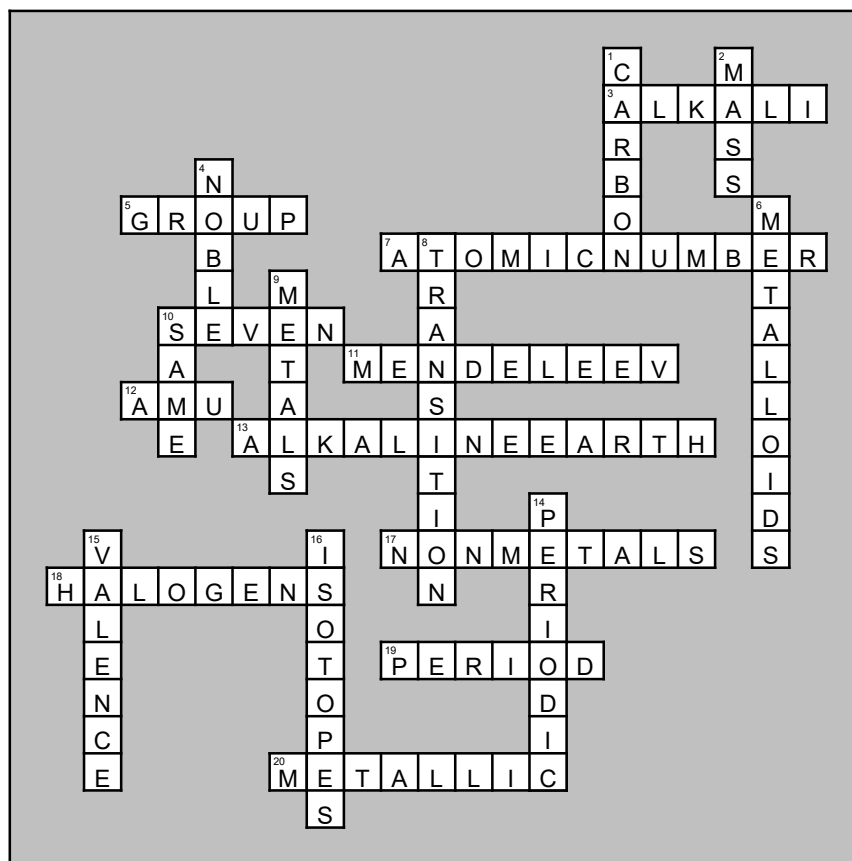


# Crossword



## Across

- Metals that have 1 valence electron, forming positive ions and bonding with non-metals. Very strong reactivity. Lithium, Sodium.
- The vertical columns on the Periodic Table of elements in which elements have similar properties; also called "families."
- The modern Periodic Table is arranged according to \_\_\_\_\_. This indicates the number of protons in an atom.
- The number of periods on the Periodic Table of Elements.
- Arranged the elements on the Periodic Table into rows in order of increasing mass so that elements with similar properties were in the same column.
- Atomic mass unit: signifying the mass of one atom of an element. Based on the carbon 12 atom.
- Metals that have 2 valence electrons, forming positive ions and bonding with non-metals. Magnesium, Calcium.
- Gain electrons easily and therefore form negative ions. Found on the right side of the Periodic Table. Brittle, non-conductors.
- Non-metals that have 7 valence electrons, forming negative ions and bonding with metals. Very strong reactivity. Fluorine, Chlorine.
- The horizontal row on the Periodic Table of Elements in which elements vary by increasing atomic number.
- The elements on the LEFT side of the Periodic Table, these properties become stronger. Most elements are this.

## Down

- All living things contain this element. Most of our body is composed of it. It has an atomic number of 6 and an atomic mass of 12. Basis for the amu.
- Atomic \_\_\_\_ was the former way to arrange the elements on the Periodic Table. An important factor in studying Chemical reactions. Measured in amu's.
- Gases in the last group of the Periodic Table that are extremely unreactive elements; colorless, odorless.
- "Staircase elements" on the Periodic Table that possess both metallic and non-metallic properties. Silicon, Arsenic.
- Elements, usually classified as metals, in the middle of the Periodic Table whose properties can vary because their valence varies; distinctive colors. e.g. Copper, Mercury, Silver.
- Lose electrons easily and therefore form positive ions. Found on the left side of the Periodic Table. Malleable, ductile, shiny, hard, good conductors.
- Elements in a group possess the \_\_\_\_ number of valence electrons, causing similar properties for all elements in that "family."
- A law in which the properties of elements changing consistently along a row of the Periodic Table (based on atomic number) and then repeats on the next row.
- The outermost electrons in any atom ... usually the electrons involved in bonding. Elements are grouped because they have the same number of these.
- Atoms of the same element, having a different number of neutrons. e.g Cl-35 has 17 protons, 18 neutrons ... Cl-37 has 17 protons, 20 neutrons.