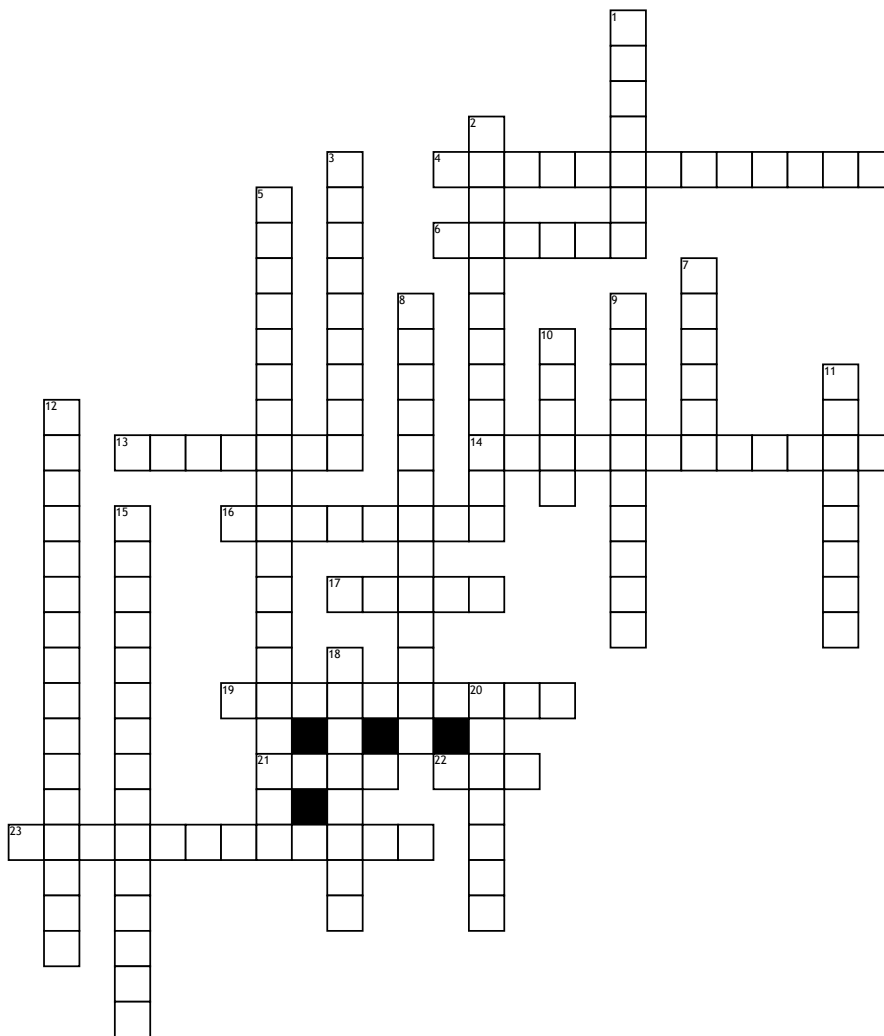


Vocabulary Homework



Across

4. The region of negative charge surrounding an atomic nucleus that is associated with an atomic orbital.
6. A positively charged ion, i.e. one that would be attracted to the cathode in electrolysis.
13. The positively charged center of the atom consisting of protons and neutrons.
14. 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.
16. A column of elements in the periodic table of the chemical elements. There are 18 of them.
17. A chemical element whose atoms readily lose electrons to form positive ions, and form metallic bonds between metal atoms and ionic bonds between nonmetal atoms.
19. A chemical element that exhibits some properties of metals and some of nonmetals.
21. The basic unit of a chemical element.
22. Atom or molecule in which the total number of electrons is not equal to the total number of protons, giving the atom a net positive or negative electrical charge.
23. The outermost shell of an atom consisting of the valence electrons.

Down

1. A subatomic particle of about the same mass as a proton but without an electric charge, present in all atomic nuclei except those of ordinary hydrogen.
2. Any of the elements lithium, sodium, potassium, rubidium, cesium, and francium, occupying Group 1A (1) of the periodic table. They are very reactive, electropositive, monovalent metals forming strongly alkaline hydroxides.
3. One of the elements which do not exhibit metallic properties, generally located in the upper righthand corner of the Periodic Table.
5. Any of the elements of group II of the periodic table; they are low-density metals that react readily with water to form strongly basic hydroxides, and with many acids to form salts.
7. A stable subatomic particle occurring in all atomic nuclei, with a positive electric charge equal in magnitude to that of an electron, but of opposite sign.
8. A table of the chemical elements arranged in order of atomic number, usually in rows, so that elements with similar atomic structure (and hence similar chemical properties) appear in vertical columns.

9. 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 (the mass number) or to the average number allowing for the relative abundances of different isotopes.
10. A negatively charged ion, i.e. one that would be attracted to the anode in electrolysis.
11. A stable subatomic particle with a charge of negative electricity, found in all atoms and acting as the primary carrier of electricity in solids.
12. The state of any particle or body on which there is an imbalance between electrons and protons.
15. An electron in an outer shell of an atom that can participate in forming chemical bonds with other atoms.
18. Any of the elements fluorine, chlorine, bromine, iodine, and astatine, occupying group VIIA (17) of the periodic table. They are reactive nonmetallic elements that form strongly acidic compounds with hydrogen from which simple salts can be made.
20. Each of two or more forms of the same element that contain equal numbers of protons but different numbers of neutrons in their nuclei, and hence differ in relative atomic mass but not in chemical properties; in particular, a radioactive form of an element.

Word Bank

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|------------------|-----------------------|----------------|----------|---------------|
| Valence Electron | Alkaline Earth Metals | Metalloids | Atom | Valence Shell |
| Alkali Metals | Electrical Charge | Proton | Nucleus | Anion |
| Periodic Table | Ion | Neutron | Families | Cation |
| Atomic Number | Metal | Non-Metals | Halogens | Electron |
| Isotope | Atomic Mass | Electron Cloud | | |