

# Atoms Study Sheet

1. proton A positively charged particle found in the nucleus of an atom.
2. neutron A particle with no charge found in the nucleus of an atom.
3. electron A negatively charged particle that orbits the nucleus of an atom.
4. nucleus The central part of an atom, containing protons and neutrons.
5. atomic number The number of protons in the nucleus of an atom.
6. mass number The total number of protons and neutrons in an atom's nucleus.
7. isotope Atoms of the same element with different numbers of neutrons.
8. ion An atom that has gained or lost one or more electrons.
9. cation A positively charged ion.
10. anion A negatively charged ion.
11. atomic mass The weighted average mass of the atoms in a naturally occurring element.
12. element A substance that cannot be broken down into simpler substances by chemical means.
13. Periodic Table A chart of the elements arranged by atomic number.
14. valence electron An electron in the outermost shell of an atom.
15. orbital A region of space around the nucleus where an electron is likely to be found.
16. quantum The minimum amount of energy that can be gained or lost by an atom.
17. molecule A group of atoms bonded together.
18. compound A substance made of atoms of two or more different elements.
19. covalent bond A bond formed when atoms share one or more pairs of electrons.
20. ionic bond A bond formed by the transfer of electrons from one atom to another.
21. atomic radius The distance from the nucleus to the outer edge of the electron cloud.
22. electronegativity The ability of an atom to attract electrons when the atom is in a compound.
23. alkali metals The elements found in Group 1 of the periodic table.
24. halogens The elements found in Group 17 of the periodic table.