

1. activity series of metals	a tool which shows the relative reactivity of common metals from most reactive to least reactive, based on the chemical reactions they undergo	16. law of conservation of matter	a statement that matter can neither be created nor destroyed; it can only be changed from one form to another
2. alloy	a homogeneous mixture of a metal with one or more metals (or carbon) to give different properties e.g. steel and brass	17. mineral	a naturally occurring solid with a fixed chemical composition from which a metal or other material can be obtained
3. anode	the positive electrode in an electrolysis cell	18. molar mass	the mass in grams of one mole of a substance with units of grams per mole; calculated by adding the atomic weights of all atoms in the substance
4. atom	the smallest particle of matter that can take part in a chemical reaction; consists of a nucleus surrounded by electrons	19. mole	the amount of substance that contains the same number of particles as there are in exactly 12.00 grams of carbon-12
5. atomic weight	the average mass of the atoms present in a naturally occurring element relative to the mass of an atom of carbon-12 taken as exactly 12 as the standard	20. ore	a natural material obtained from the crust of the Earth that contains metals or other material
6. Avogadro's law	a statement that equal volumes of all gases at the same temperature and pressure contain equal numbers of particles	21. percentage composition	the percentage by mass of each element of a compound
7. Avogadro's number	the number of particles in one mole of any substance; equal to 6.022×10^{23}	22. periodic table	a table of the chemical elements in order of atomic number, arranged in rows and columns to illustrate periodic similarities and trends in physical and chemical properties
8. cathode	the negative electrode in an electrolysis cell	23. theoretical yield	the quantity of product predicted from the balanced chemical equation when known quantities of reactants undergo reaction
9. electrolysis	the passing of a direct electric current through a solution or molten material to decompose it	24. valency	the combining power of an element
10. electronegativity	a measure of the ability of an element to attract electrons		
11. empirical formula	the formula for a compound representing its atomic or ionic composition expressed in simple whole numbers e.g. the empirical formula for benzene, C ₆ H ₆ IS CH		
12. half-equations	an equation written to describe an oxidation or reduction half-reaction, showing the loss or gain of electrons by an atom, forming an ion		
13. ionisation energy	the energy required to remove an electron from an atom in the gas state		
14. isotopes	atoms with the same number of protons, but different numbers of neutrons and so different mass		
15. law of combining volumes	a statement that the volumes of reacting gases involved (at the same temperature and pressure) may be expressed in simple whole number ratios		