





















































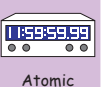













































# The Periodic Table of the Elements, in Pictures

Periods ↓ 1 2 3 4 5 6 7 8	Alkali Metals Group 1		Alkali Earth Metals 2		Transition Metals								Boron Group 13	Carbon Group 14	Nitrogen Group 15	Oxygen Group 16	Halogens 17	Noble Gases 18										
	H 1 Hydrogen  Sun and Stars		He 2 Helium  Balloons										B 5 Boron  Sports Equipment	C 6 Carbon  Basis of Life's Molecules	N 7 Nitrogen  Protein	O 8 Oxygen  Air	F 9 Fluorine  Toothpaste	Ne 10 Neon  Advertising Signs										
	Li 3 Lithium  Batteries	Be 4 Beryllium  Emeralds									Al 13 Aluminum  Airplanes	Si 14 Silicon  Stone, Sand, and Soil	P 15 Phosphorus  Bones	S 16 Sulfur  Egg Yolks	Cl 17 Chlorine  Swimming Pools	Ar 18 Argon  Light Bulbs												
	Na 11 Sodium  Salt	Mg 12 Magnesium  Chlorophyll									K 19 Potassium  Fruits and Vegetables	Ca 20 Calcium  Shells and Bones	Sc 21 Scandium  Bicycles	Ti 22 Titanium  Aerospace	V 23 Vanadium  Springs	Cr 24 Chromium  Stainless Steel	Mn 25 Manganese  Earthmovers	Fe 26 Iron  Steel Structures	Co 27 Cobalt  Magnets	Ni 28 Nickel  Coins	Cu 29 Copper  Electric Wires	Zn 30 Zinc  Brass Instruments	Ga 31 Gallium  Light-Emitting Diodes (LEDs)	Ge 32 Germanium  Semiconductor Electronics	As 33 Arsenic  Poison	Se 34 Selenium  Copiers	Br 35 Bromine  Photography Film	Kr 36 Krypton  Flashlights
	Rb 37 Rubidium  Global Navigation	Sr 38 Strontium  Fireworks	Y 39 Yttrium  Lasers	Zr 40 Zirconium  Chemical Pipelines	Nb 41 Niobium  Mag Lev Trains	Mo 42 Molybdenum  Cutting Tools	Tc 43 Technetium  Radioactive Diagnosis	Ru 44 Ruthenium  Electric Switches	Rh 45 Rhodium  Searchlight Reflectors	Pd 46 Palladium  Pollution Control	Ag 47 Silver  Jewelry	Cd 48 Cadmium  Paint	In 49 Indium  Liquid Crystal Displays (LCDs)	Sn 50 Tin  Plated Food Cans	Sb 51 Antimony  Car Batteries	Te 52 Tellurium  Thermoelectric Coolers	I 53 Iodine  Disinfectant	Xe 54 Xenon  High-Intensity Lamps										
	Cs 55 Cesium  Atomic Clocks	Ba 56 Barium  X-Ray Diagnosis	57 - 71 Rare Earth Metals		Hf 72 Hafnium  Nuclear Submarines	Ta 73 Tantalum  Mobile Phones	W 74 Tungsten  Lamp Filaments	Re 75 Rhenium  Rocket Engines	Os 76 Osmium  Pen Points	Ir 77 Iridium  Spark Plugs	Pt 78 Platinum  Labware	Au 79 Gold  Jewelry	Hg 80 Mercury  Thermometers	Tl 81 Thallium  Low-Temperature Thermometers	Pb 82 Lead  Weights	Bi 83 Bismuth  Fire Sprinklers	Po 84 Polonium  Anti-Static Brushes	At 85 Astatine  Radioactive Medicine	Rn 86 Radon  Surgical Implants									
	Fr 87 Francium  Laser Atom Traps	Ra 88 Radium  Luminous Watches	89 - 103 Actinide Metals		Rf 104 Rutherfordium	Db 105 Dubnium	Sg 106 Seaborgium	Bh 107 Bohrium	Hs 108 Hassium	Mt 109 Meitnerium	Ds 110 Darmstadtium	Rg 111 Roentgenium	Cn 112 Copernicium	Uut 113 Ununtrium	Fl 114 Flerovium	Uup 115 Ununpentium	Lv 116 Livermorium	Uus 117 Ununseptium	Uuo 118 Ununoctium									
	radioactive, never found in nature, no uses except atomic research																											
Rare Earth Metals		La 57 Lanthanum  Telescope Lenses	Ce 58 Cerium  Lighter Flint	Pr 59 Praseodymium  Torchworkers' Eyeglasses	Nd 60 Neodymium  Electric Motor Magnets	Pm 61 Promethium  Luminous Dials	Sm 62 Samarium  Electric Motor Magnets	Eu 63 Europium  Color Televisions	Gd 64 Gadolinium  MRI Diagnosis	Tb 65 Terbium  Fluorescent Lamps	Dy 66 Dysprosium  Smart Material Actuators	Ho 67 Holmium  Laser Surgery	Er 68 Erbium  Optical Fiber Communications	Tm 69 Thulium  Laser Surgery	Yb 70 Ytterbium  Scientific Fiber Lasers	Lu 71 Lutetium  Photodynamic Medicine	radioactive, never found in nature, no uses except atomic research											
Actinide Metals		Ac 89 Actinium  Radioactive Medicine	Th 90 Thorium  Gas Lamp Mantles	Pa 91 Protactinium  Radioactive Waste	U 92 Uranium  Nuclear Power	Np 93 Neptunium  Radioactive Waste	Pu 94 Plutonium  Nuclear Weapons	Am 95 Americium  Smoke Detectors	Cm 96 Curium  Mineral Analyzers	Bk 97 Berkelium  Radioactive Waste	Cf 98 Californium  Mineral Analyzers	radioactive, never found in nature, no uses except atomic research																