The Periodic Table of the Elements, in Pictures

Periods

Alkali Metals Group 1 | Alkali Earth Metals 2 | Transition Metals 3 4 5 6 7 8 9 10 11 12 | Boron Group 13 | Carbon Group 14 | Nitrogen Group 15 | Oxygen Group 16 | Halogens 17 | Noble Gases 18

1 H Hydrogen 1 — Sun and Stars; He Helium 2 — Balloons

2 Li Lithium 3 — Batteries; Be Beryllium 4 — Emeralds; B Boron 5 — Sports Equipment; C Carbon 6 — Basis of Life's Molecules; N Nitrogen 7 — Protein; O Oxygen 8 — Air; F Fluorine 9 — Toothpaste; Ne Neon 10 — Advertising Signs

3 Na Sodium 11 — Salt; Mg Magnesium 12 — Chlorophyll; Al Aluminum 13 — Airplanes; Si Silicon 14 — Stone, Sand, and Soil; P Phosphorus 15 — Bones; S Sulfur 16 — Egg Yolks; Cl Chlorine 17 — Swimming Pools; Ar Argon 18 — Light Bulbs

4 K Potassium 19 — Fruits and Vegetables; Ca Calcium 20 — Shells and Bones; Sc Scandium 21 — Bicycles; Ti Titanium 22 — Aerospace; V Vanadium 23 — Springs; Cr Chromium 24 — Stainless Steel; Mn Manganese 25 — Earthmovers; Fe Iron 26 — Steel Structures; Co Cobalt 27 — Magnets; Ni Nickel 28 — Coins; Cu Copper 29 — Electric Wires; Zn Zinc 30 — Brass Instruments; Ga Gallium 31 — Light-Emitting Diodes (LEDs); Ge Germanium 32 — Semiconductor Electronics; As Arsenic 33 — Poison; Se Selenium 34 — Copiers; Br Bromine 35 — Photography Film; Kr Krypton 36 — Flashlights

5 Rb Rubidium 37 — Global Navigation; Sr Strontium 38 — Fireworks; Y Yttrium 39 — Lasers; Zr Zirconium 40 — Chemical Pipelines; Nb Niobium 41 — Mag Lev Trains; Mo Molybdenum 42 — Cutting Tools; Tc Technetium 43 — Radioactive Diagnosis; Ru Ruthenium 44 — Electric Switches; Rh Rhodium 45 — Searchlight Reflectors; Pd Palladium 46 — Pollution Control; Ag Silver 47 — Jewelry; Cd Cadmium 48 — Paint; In Indium 49 — Liquid Crystal Displays (LCDs); Sn Tin 50 — Plated Food Cans; Sb Antimony 51 — Car Batteries; Te Tellurium 52 — Thermoelectric Coolers; I Iodine 53 — Disinfectant; Xe Xenon 54 — High-Intensity Lamps

6 Cs Cesium 55 — Atomic Clocks; Ba Barium 56 — X-Ray Diagnosis; 57 - 71 Rare Earth Metals; Hf Hafnium 72 — Nuclear Submarines; Ta Tantalum 73 — Mobile Phones; W Tungsten 74 — Lamp Filaments; Re Rhenium 75 — Rocket Engines; Os Osmium 76 — Pen Points; Ir Iridium 77 — Spark Plugs; Pt Platinum 78 — Labware; Au Gold 79 — Jewelry; Hg Mercury 80 — Thermometers; Tl Thallium 81 — Low-Temperature Thermometers; Pb Lead 82 — Weights; Bi Bismuth 83 — Fire Sprinklers; Po Polonium 84 — Anti-Static Brushes; At Astatine 85 — Radioactive Medicine; Rn Radon 86 — Surgical Implants

7 Fr Francium 87 — Laser Atom Traps; Ra Radium 88 — Luminous Watches; 89 - 103 Actinide Metals; Rf Rutherfordium 104; Db Dubnium 105; Sg Seaborgium 106; Bh Bohrium 107; Hs Hassium 108; Mt Meitnerium 109; Ds Darmstadtium 110; Rg Roentgenium 111; Cn Copernicium 112; 113; Fl Flerovium 114; 115; Lv Livermorium 116; 117; 118

Superheavy Elements — radioactive, never found in nature, no uses except atomic research

8 119; 120; 121 - 153

Rare Earth Metals: La Lanthanum 57 — Telescope Lenses; Ce Cerium 58 — Lighter Flints; Pr Praseodymium 59 — Torchworkers' Eyeglasses; Nd Neodymium 60 — Electric Motor Magnets; Pm Promethium 61 — Luminous Dials; Sm Samarium 62 — Electric Motor Magnets; Eu Europium 63 — Color Televisions; Gd Gadolinium 64 — MRI Diagnosis; Tb Terbium 65 — Fluorescent Lamps; Dy Dysprosium 66 — Smart Material Actuators; Ho Holmium 67 — Laser Surgery; Er Erbium 68 — Optical Fiber Communications; Tm Thulium 69 — Laser Surgery; Yb Ytterbium 70 — Scientific Fiber Lasers; Lu Lutetium 71 — Photodynamic Medicine

Actinide Metals: Ac Actinium 89 — Radioactive Medicine; Th Thorium 90 — Gas Lamp Mantles; Pa Protactinium 91 — Radioactive Waste; U Uranium 92 — Nuclear Power; Np Neptunium 93 — Radioactive Waste; Pu Plutonium 94 — Nuclear Weapons; Am Americium 95 — Smoke Detectors; Cm Curium 96 — Mineral Analyzers; Bk Berkelium 97 — Radioactive Waste; Cf Californium 98 — Mineral Analyzers; Es Einsteinium 99; Fm Fermium 100; Md Mendelevium 101; No Nobelium 102; Lr Lawrencium 103

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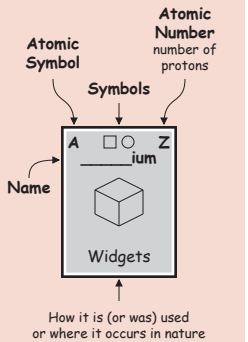

Solid
Liquid
Gas
at room temperature

The color of the symbol is the color of the element in its most common pure form.
Examples: metallic solid; red liquid; colorless gas

Human Body — top ten elements by weight
Earth's Crust — top eight elements by weight
Magnetic — ferromagnetic at room temperature
Noble Metals — corrosion-resistant
Radioactive — all isotopes are radioactive
Only Traces Found in Nature — less than a millionth percent of earth's crust
Never Found in Nature — only made by people