Periodic Table with Electrons per Shell

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1 H Hydrogen 1																	2 He Helium 2
2	3 Li Lithium 2-1	4 Be Beryllium 2-2											5 B Boron 2-3	6 C Carbon 2-4	7 N Nitrogen 2-5	8 O Oxygen 2-6	9 F Fluorine 2-7	10 Ne Neon 2-8
3	11 Na Sodium 2-8-1	12 Mg Magnesium 2-8-2											13 Al Aluminium 2-8-3	14 Si Silicon 2-8-4	15 P Phosphorus 2-8-5	16 S Sulfur 2-8-6	17 Cl Chlorine 2-8-7	18 Ar Argon 2-8-8
4	19 K Potassium 2-8-8-1	20 Ca Calcium 2-8-8-2	21 Sc Scandium 2-8-9-2	22 Ti Titanium 2-8-10-2	23 V Vanadium 2-8-11-2	24 Cr Chromium 2-8-13-1	25 Mn Manganese 2-8-13-2	26 Fe Iron 2-8-14-2	27 Co Cobalt 2-8-15-2	28 Ni Nickel 2-8-16-2	29 Cu Copper 2-8-18-1	30 Zn Zinc 2-8-18-2	31 Ga Gallium 2-8-18-3	32 Ge Germanium 2-8-18-4	33 As Arsenic 2-8-18-5	34 Se Selenium 2-8-18-6	35 Br Bromine 2-8-18-7	36 Kr Krypton 2-8-18-8
5	37 Rb Rubidium 2-8-18-8-1	38 Sr Strontium 2-8-18-8-2	39 Y Yttrium 2-8-18-9-2	40 Zr Zirconium 2-8-18-10-2	41 Nb Niobium 2-8-18-12-1	42 Mo Molybdenum 2-8-18-13-1	43 Tc Technetium 2-8-18-13-2	44 Ru Ruthenium 2-8-18-15-1	45 Rh Rhodium 2-8-18-16-1	46 Pd Palladium 2-8-18-18	47 Ag Silver 2-8-18-18-1	48 Cd Cadmium 2-8-18-18-2	49 In Indium 2-8-18-18-3	50 Sn Tin 2-8-18-18-4	51 Sb Antimony 2-8-18-18-5	52 Te Tellurium 2-8-18-18-6	53 I Iodine 2-8-18-18-7	54 Xe Xenon 2-8-18-18-8
6	55 Cs Cesium 2-8-18-18-8-1	56 Ba Barium 2-8-18-18-8-2		72 Hf Hafnium 2-8-18-32-10-2	73 Ta Tantalum 2-8-18-32-11-2	74 W Tungsten 2-8-18-32-12-2	75 Re Rhenium 2-8-18-32-13-2	76 Os Osmium 2-8-18-32-14-2	77 Ir Iridium 2-8-18-32-15-2	78 Pt Platinum 2-8-18-32-17-1	79 Au Gold 2-8-18-32-18-1	80 Hg Mercury 2-8-18-32-18-2	81 Tl Thallium 2-8-18-32-18-3	82 Pb Lead 2-8-18-32-18-4	83 Bi Bismuth 2-8-18-32-18-5	84 Po Polonium 2-8-18-32-18-6	85 At Astatine 2-8-18-32-18-7	86 Rn Radon 2-8-18-32-18-8
7	87 Fr Francium 2-8-18-32-18-8-1	88 Ra Radium 2-8-18-32-18-8-2		104 Rf Rutherfordium 2-8-18-32-32-10-2	105 Db Dubnium 2-8-18-32-32-11-2	106 Sg Seaborgium 2-8-18-32-32-12-2	107 Bh Bohrium 2-8-18-32-32-13-2	108 Hs Hassium 2-8-18-32-32-14-2	109 Mt Meitnerium 2-8-18-32-32-15-2	110 Ds Darmstadtium 2-8-18-32-32-16-2	111 Rg Roentgenium 2-8-18-32-32-17-2	112 Cn Copernicium 2-8-18-32-32-18-2	113 Nh Nihonium 2-8-18-32-32-18-3	114 Fl Flerovium 2-8-18-32-32-18-4	115 Mc Moscovium 2-8-18-32-32-18-5	116 Lv Livermorium 2-8-18-32-32-18-6	117 Ts Tennessine 2-8-18-32-32-18-7	118 Og Oganesson 2-8-18-32-32-18-8

				57 La Lanthanum 2-8-18-18-9-2	58 Ce Cerium 2-8-18-19-9-2	59 Pr Praseodymium 2-8-18-21-8-2	60 Nd Neodymium 2-8-18-22-8-2	61 Pm Promethium 2-8-18-23-8-2	62 Sm Samarium 2-8-18-24-8-2	63 Eu Europium 2-8-18-25-8-2	64 Gd Gadolinium 2-8-18-25-9-2	65 Tb Terbium 2-8-18-27-8-2	66 Dy Dysprosium 2-8-18-28-8-2	67 Ho Holmium 2-8-18-29-8-2	68 Er Erbium 2-8-18-30-8-2	69 Tm Thulium 2-8-18-31-8-2	70 Yb Ytterbium 2-8-18-32-8-2	71 Lu Lutetium 2-8-18-32-9-2
				89 Ac Actinium 2-8-18-32-18-9-2	90 Th Thorium 2-8-18-32-18-10-2	91 Pa Protactinium 2-8-18-32-20-9-2	92 U Uranium 2-8-18-32-21-9-2	93 Np Neptunium 2-8-18-32-22-9-2	94 Pu Plutonium 2-8-18-32-24-8-2	95 Am Americium 2-8-18-32-25-8-2	96 Cm Curium 2-8-18-32-25-9-2	97 Bk Berkelium 2-8-18-32-27-8-2	98 Cf Californium 2-8-18-32-28-8-2	99 Es Einsteinium 2-8-18-32-29-8-2	100 Fm Fermium 2-8-18-32-30-8-2	101 Md Mendelevium 2-8-18-32-31-8-2	102 No Nobelium 2-8-18-32-32-8-2	103 Lr Lawrencium 2-8-18-32-32-8-3

Alkali metals | Alkaline earth metals | Transition metals | Post-transition metals | Metalloids | Reactive nonmetals | Halogens | Noble gases | Lanthanides | Actinides

https://periodictable.page/

Periodic Table PDF with Electrons per Shell (color): notes

About this sheet

Each tile shows the atomic number, symbol, name and the number of electrons in each shell, for example 2-8-1 for sodium.

Best for

Drawing Bohr diagrams, seeing how shells fill across a period, and linking shell counts to periods and valence electrons.

Printing

Prints well in color. The family shades are light pastels, so the text stays dark and readable and the sheet does not use heavy ink. Sized for A4 landscape: print at 100% (actual size) so the margins stay correct.

What the data shows

Each tile shows how the electrons are spread over the shells. Oganesson, for example, reads 2, 8, 18, 32, 32, 18, 8, filling seven shells, the most any element uses.

The number of elements with 1 to 7 shells is 2, 8, 8, 19, 17, 32 and 32. Palladium is the one element with fewer shells than its period number, because its outer shell is empty.

How the table is organised

Atomic number counts the protons in an atom's nucleus and fixes each element's place in the table. Moving down a group adds a new electron shell, so atomic radius grows and metallic character increases.

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