

Rough Dates of Discovery of the chemical Elements – from *Introduction to Modern⁹ Inorganic Chemistry* 6th ed. MacKay, MacKay, Henderson, 2002, Nelson Thornes

<i>Date range</i>	<i>Number of elements discovered</i>	<i>Comments</i>
Prehistoric	3	C, S, Au which occur native, i.e. uncombined
ca. 3000 BC	5	Ag, Cu, Pb, Sn, Hg with readily processed ores
ca. 1000 BC	1	Fe requiring higher temperature reduction
ca. 500 BC	1	Zn ca. 90% pure
Up to 1650	4	As, Sb, Bi: Zn rediscovered
1650–1700	1	First dated discovery: P in 1669
1700–50	3	Co, Ni and native Pt
1750–75	7	First gases H, N, O, Cl and Ni, Mn, Bi*
1775–1800	5	Cr, Mo, W, Te, Ti (finally pure in 1910)
1800–25	18	Active metals, Li, Na, K, Mg to Ba: heavier metals Ce, Ir, Os, Pd, Rh, Zr: also B, Cd, I, Se
1825–50	9	Br, Si, Be, Al, V, La, Ru, Th, U
1850–75	5	Rb, Cs, Ga, Tl, Nb {He seen in solar spectrum}
1875–1900	approx. 11	5 inert gases: F, Ge: radioactive Po, Ra, Ac: some lanthanides
1900–25	approx. 10	Rn, Ta, In, Hf, Re, Pa, lanthanides
1925–50	11	2 lanthanides: radioactive Tc, Pm, Fr, At: man-made post-uranium Np, Pu, Am, Cm, Bk
1950–75	10	Last 2 purified lanthanides: 8 man-made
1975–today	approx. 12	Man-made (a few atoms only)

Notes: 1. Compare Tables 2.5 and 2.6 for the names and periodic positions of the elements. 2. Many dates of discovery are approximate, as the existence of many elements was recognized anything from a few months up to a century before final purification. The very similar lanthanides present particular difficulties of definition. 3. *Bismuth known earlier but confused with lead. 4. See the reference by Ringnes (Appendix A) for a very readable account of the origins of the names of the chemical elements.