

Section 5-1 History of the Periodic Table

Stanislao Cannizzaro presented a method to accurately measure the relative mass of an atom in 1860.

Dmitri Mendeleev put the elements in order by atomic mass. He noticed similar properties of atoms at regular intervals. His first periodic table was published in 1869.

по ее ней, хит кажется, уже ясно выражается приближность вы-
сказанного мною начала ко всей совокупности элементов, для
которых известны сь достоверности. На этого разя и желая
преимущественно найти общую систему элементов. Вотъ этотъ
опытъ:

			Ti=50	Zr=90	?=180,
			V=51	Nb=94	Ta=182,
			Cr=52	Mo=96	W=186,
			Mn=55	Rh=104,4	Pt=197,4
			Fe=56	Ir=104,4	Ir=198,
			Ni=Co=59	Pi=106,6	Os=199,
			Cu=63,4	Ag=108	Hg=200,
			Zn=65,2	Cd=112	
			?=68	Ur=116	Au=197?
			?=70	Sa=118	
			As=75	Sb=122	Bi=210
			Se=79,4	Te=128?	
			Br=80	I=127	
			Rh=85,4	Cs=133	Tl=201
			Sr=87,6	Ba=137	Pb=207,
			?=89	Ce=92	
			YEr=96	La=94	
			YU=95	Di=95	
			?H=75,8	Th=118?	

Henry Moseley based the periodic table by the atomic number (of protons) instead of atomic mass in 1911. 1

Section 5-1 (Cont'd)

Periodic Law

- physical and chemical properties of the elements are periodic functions of their atomic numbers.

Periodic Table

- arrangement of the elements in order of their atomic numbers. Elements with similar properties fall in same column.

Periodicity occurs from the arrangement of electrons around the nucleus

Noble Gases – discovered on Earth between 1894 through 1900 and were added between group 17 and group 1. Helium was discovered as a component of the sun in 1868 based on the emission spectrum of sunlight.

Lanthanides & Actinides – these are between group 3 and group 4. They are placed on the bottom of charts to save space. 2