



6.6A

Metals, Non-metals, Metalloids

Picture Vocabulary

Periodic Table of Elements

Periodic Table of Elements

1A																		8A	
1	2																	10	11
H 1.008	He 4.002																	Ne 20.179	
3	4																	9	10
Li 6.941	Be 9.0121																	F 18.998	Ne 20.179
11	12																	17	18
Na 22.989	Mg 24.305																	Cl 35.453	Ar 39.948
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		
K 39.098	Ca 40.078	Sc 44.955	Ti 47.867	V 50.941	Cr 51.996	Mn 54.938	Fe 55.845	Co 58.933	Ni 58.693	Cu 63.546	Zn 65.409	Ga 69.723	Ge 72.64	As 74.921	Se 78.96	Br 79.904	Kr 83.798		
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54		
Rb 85.467	Sr 87.62	Y 88.905	Zr 91.224	Nb 92.906	Mo 95.94	Tc 98	Ru 101.07	Rh 102.905	Pd 106.42	Ag 107.868	Cd 112.411	In 114.818	Sn 118.710	Sb 121.760	Te 127.60	I 126.904	Xe 131.293		
55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86		
Cs 132.905	Ba 137.327		Hf 178.49	Ta 180.947	W 183.84	Re 186.207	Os 190.23	Ir 192.217	Pt 195.078	Au 196.966	Hg 200.59	Tl 204.383	Pb 207.2	Bi 208.980	Po 209	At 210	Rn 222		
87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118		
Fr 223	Ra 226		Rf 261	Db 262	Sg 266	Bh 264	Hs 277	Mt 268	Ds 271	Rg 272	Cn 285	Uut 284	Uuq 289	Uup 288	Uuh 289	Uus 289	Uuo 289		

Lanthanide series														
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La 138.905	Ce 140.116	Pr 140.907	Nd 144.24	Pm 145	Sm 150.36	Eu 151.964	Gd 157.25	Tb 158.925	Dy 162.500	Ho 164.930	Er 167.259	Tm 168.934	Yb 173.04	Lu 174.967
Actinide series														
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
Ac 227	Th 232.038	Pa 231.036	U 238.028	Np 237	Pu 244	Am 243	Cm 247	Bk 247	Cf 251	Es 252	Fm 257	Md 258	No 259	Lr 262

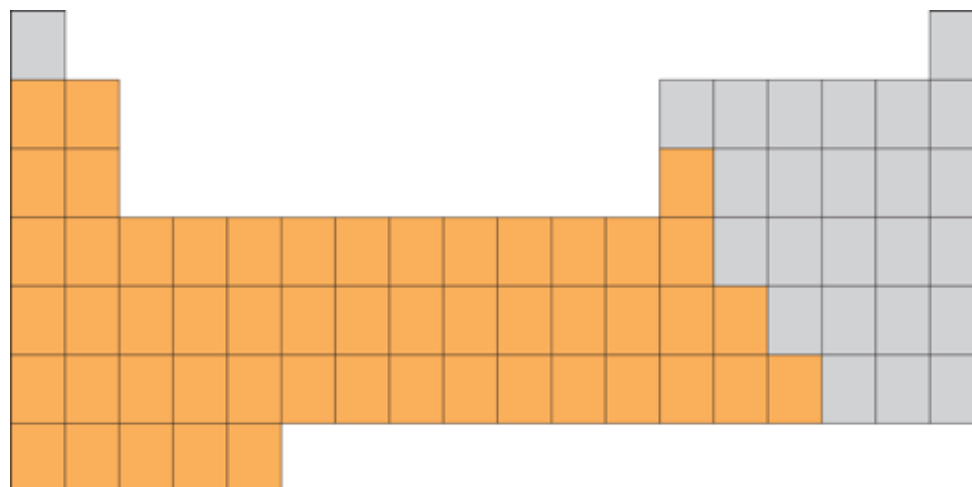
A table in which all the known elements are arranged by properties and are represented by one or two letter chemical symbols.

Physical Property



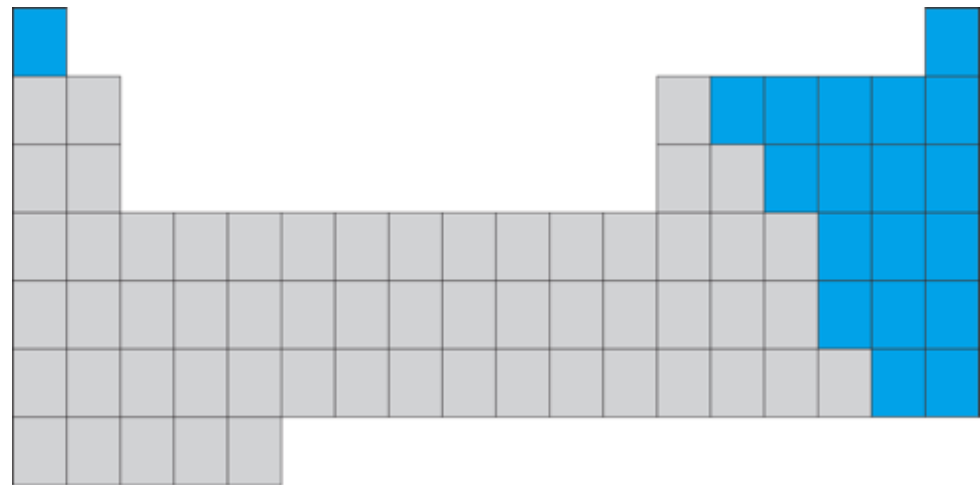
Characteristics that can be observed or measured without changing the substance, for example color, melting point, and conductivity.

Metal



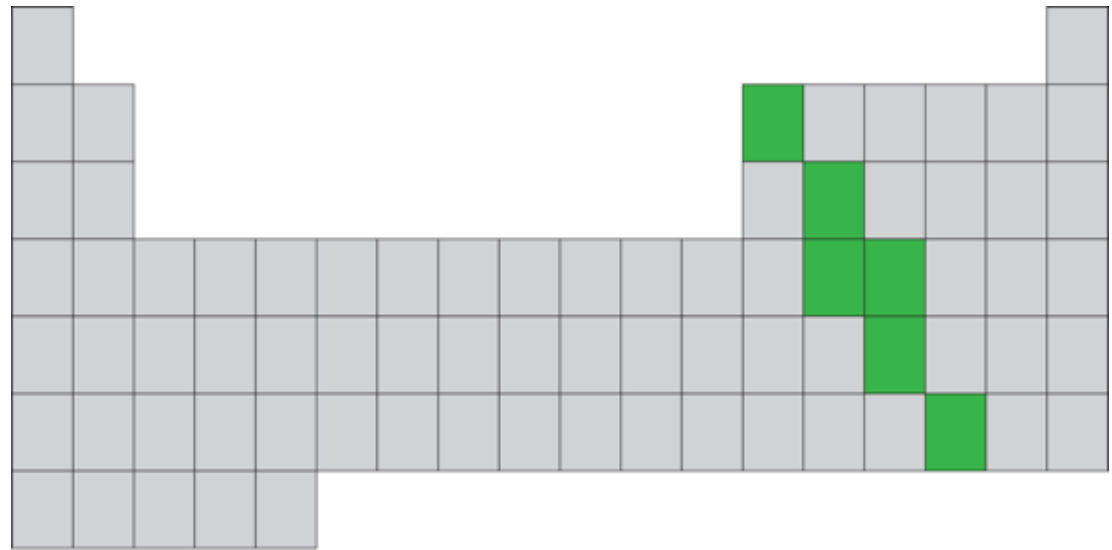
Most elements are metals; they are typically solid, shiny, malleable, and good conductors of heat and electricity.

Non-metal



Elements typically not shiny, usually a gas or brittle solid, not malleable, and poor conductors of heat and electricity.

Metalloids



Elements that have properties of both metals and non-metals; sometimes referred to as semiconductors.

Luster

Metallic

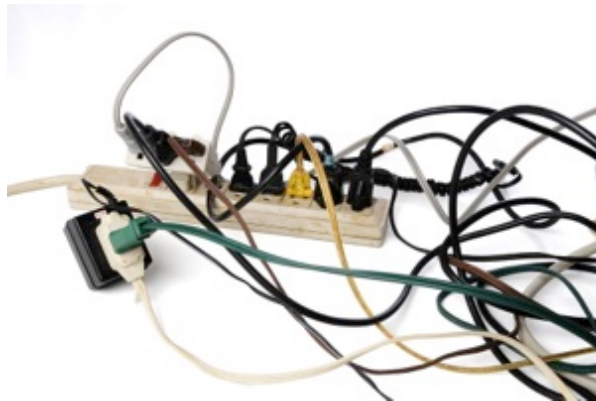


Non-metallic



A physical property, the way the surface of a substance shines or reflects light, most general classification between metallic (shiny) and non-metallic (dull or glassy).

Conductivity



A physical property, the ability or power to easily transfer heat, electricity, or sound.

Malleability



A physical property, able to be shaped or formed into thin sheets by hammering or pressure.

Brittle



A physical property, tendency to break, snap, or crack without first bending or changing shape as a result of application of little force, an example is glass that shatters easily.

Insulator



A substance that resists electric current,
or a material that resists the flow of heat.

Conductor



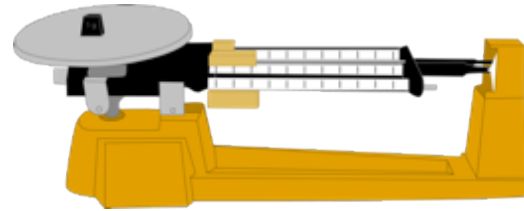
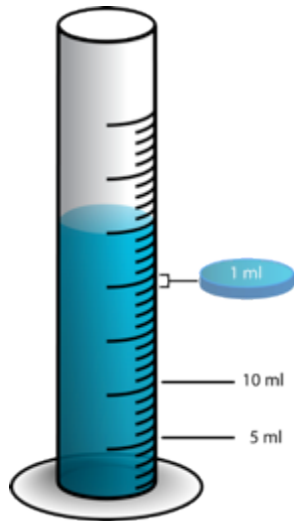
A substance that allows the flow of electric charge or transfers thermal energy through matter.

Semiconductor



A substance that shows the property of electrical conductivity between that of a conductor and an insulator, the foundation of modern electronics.

Matter



Has mass and takes up space. Matter occurs as elements, compounds, and mixtures.

Classify/Classification

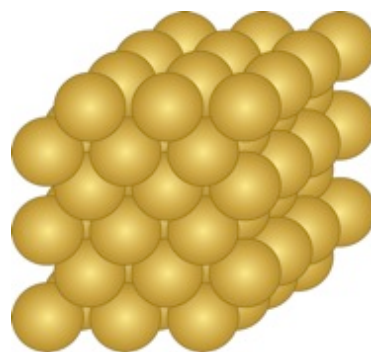


Sort or group together based on shared characteristics, physical properties, or chemical properties.

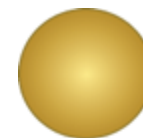
Element



Gold Nuggets



Pure
Elemental
Gold



Atom of
Gold

A pure substance composed of the same type of atom throughout.