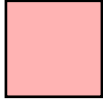
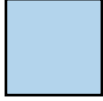
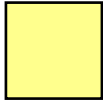


Classes of elements color coded on the tiny periodic table at the top of R-17

Group names color coded on big periodic table on the back of R-17

Using this as a guide, color code your periodic table to show the three **CLASSES** of elements.

1 Hydrogen 1 H 1.01																	18 Helium 2 He 4.00	
3 Lithium Li 6.94	4 Beryllium Be 9.01											5 Boron B 10.81	6 Carbon C 12.01	7 Nitrogen N 14.01	8 Oxygen O 16.00	9 Fluorine F 19.00	10 Neon Ne 20.18	
11 Sodium Na 22.99	12 Magnesium Mg 24.31											13 Aluminum Al 26.98	14 Silicon Si 28.09	15 Phosphorus P 30.97	16 Sulfur S 32.07	17 Chlorine Cl 35.45	18 Argon Ar 39.95	
19 Potassium K 39.10	20 Calcium Ca 40.08	21 Scandium Sc 44.96	22 Titanium Ti 47.88	23 Vanadium V 50.94	24 Chromium Cr 52.00	25 Manganese Mn 54.94	26 Iron Fe 55.85	27 Cobalt Co 58.93	28 Nickel Ni 58.69	29 Copper Cu 63.55	30 Zinc Zn 65.39	31 Gallium Ga 69.72	32 Germanium Ge 72.61	33 Arsenic As 74.92	34 Selenium Se 78.96	35 Bromine Br 79.90	36 Krypton Kr 83.80	
37 Rubidium Rb 85.47	38 Strontium Sr 87.62	39 Yttrium Y 88.91	40 Zirconium Zr 91.22	41 Niobium Nb 92.91	42 Molybdenum Mo 95.94	43 Technetium Tc (98)	44 Ruthenium Ru 101.07	45 Rhodium Rh 102.91	46 Palladium Pd 106.42	47 Silver Ag 107.87	48 Cadmium Cd 112.41	49 Indium In 114.82	50 Tin Sn 118.71	51 Antimony Sb 121.76	52 Tellurium Te 127.60	53 Iodine I 126.90	54 Xenon Xe 131.29	
55 Cesium Cs 132.91	56 Barium Ba 137.33	57-70 *	71 Lanthanum La 174.97	72 Hafnium Hf 178.49	73 Tantalum Ta 180.95	74 Tungsten W 183.84	75 Rhenium Re 186.21	76 Osmium Os 190.23	77 Iridium Ir 192.22	78 Platinum Pt 195.08	79 Gold Au 196.97	80 Mercury Hg 200.59	81 Thallium Tl 204.38	82 Lead Pb 207.20	83 Bismuth Bi 208.98	84 Polonium Po (209)	85 Astatine At (210)	86 Radon Rn (222)
87 Francium Fr (223)	88 Radium Ra (226)	89-102 **	103 Lawrencium Lr (262)	104 Rutherfordium Rf (267)	105 Dubnium Db (268)	106 Seaborgium Sg (271)	107 Bohrium Bh (272)	108 Hassium Hs (270)	109 Meitnerium Mt (276)	110 Darmstadtium Ds (281)	111 Roentgenium Rg (280)	112 Copernicium Cn (285)	113 Uut (284)	114 Uuq (289)	115 Uup (288)	116 Uuh (293)	117 Uus (294?)	118 Uuo (294)

 Metals
 Non-metals
 Metalloids

*lanthanides
**actinides

57 Lanthanum La 138.91	58 Cerium Ce 140.12	59 Praseodymium Pr 140.91	60 Neodymium Nd 144.24	61 Promethium Pm (145)	62 Samarium Sm 150.36	63 Europium Eu 151.97	64 Gadolinium Gd 157.25	65 Terbium Tb 158.93	66 Dysprosium Dy 162.50	67 Holmium Ho 164.93	68 Erbium Er 167.26	69 Thulium Tm 168.93	70 Ytterbium Yb 173.04
89 Actinium Ac (227)	90 Thorium Th 232.04	91 Protactinium Pa 231.04	92 Uranium U 238.03	93 Neptunium Np (237)	94 Plutonium Pu (244)	95 Americium Am (243)	96 Curium Cm (247)	97 Berkelium Bk (247)	98 Californium Cf (251)	99 Einsteinium Es (252)	100 Fermium Fm (257)	101 Mendelevium Md (258)	102 Nobelium No (259)

Polonium is sometimes considered a metal, metalloid, or a non-metal depending on which table you are looking at. Astatine is sometimes considered a nonmetal, sometimes a metalloid. No big deal, it is weird!

Using this as a guide,
color code your periodic
table to show the
GROUP NAMES

1 Hydrogen 1 H 1.01	2 Helium 2 He 4.00											13 Boron 5 B 10.81	14 Carbon 6 C 12.01	15 Nitrogen 7 N 14.01	16 Oxygen 8 O 16.00	17 Fluorine 9 F 19.00	18 Neon 10 Ne 20.18
3 Lithium 3 Li 6.94	4 Beryllium 4 Be 9.01											13 Aluminum 13 Al 26.98	14 Silicon 14 Si 28.09	15 Phosphorus 15 P 30.97	16 Sulfur 16 S 32.07	17 Chlorine 17 Cl 35.45	18 Argon 18 Ar 39.95
11 Sodium 11 Na 22.99	12 Magnesium 12 Mg 24.31	3 Scandium 21 Sc 44.96	4 Titanium 22 Ti 47.88	5 Vanadium 23 V 50.94	6 Chromium 24 Cr 52.00	7 Manganese 25 Mn 54.94	8 Iron 26 Fe 55.85	9 Cobalt 27 Co 58.93	10 Nickel 28 Ni 58.69	11 Copper 29 Cu 63.55	12 Zinc 30 Zn 65.39	13 Gallium 31 Ga 69.72	14 Germanium 32 Ge 72.61	15 Arsenic 33 As 74.92	16 Selenium 34 Se 78.96	17 Bromine 35 Br 79.90	18 Krypton 36 Kr 83.80
19 Potassium 19 K 39.10	20 Calcium 20 Ca 40.08	39 Yttrium 39 Y 88.91	40 Zirconium 40 Zr 91.22	41 Niobium 41 Nb 92.91	42 Molybdenum 42 Mo 95.94	43 Technetium 43 Tc (98)	44 Ruthenium 44 Ru 101.07	45 Rhodium 45 Rh 102.91	46 Palladium 46 Pd 106.42	47 Silver 47 Ag 107.87	48 Cadmium 48 Cd 112.41	49 Indium 49 In 114.82	50 Tin 50 Sn 118.71	51 Antimony 51 Sb 121.76	52 Tellurium 52 Te 127.60	53 Iodine 53 I 126.90	54 Xenon 54 Xe 131.29
37 Rubidium 37 Rb 85.47	38 Strontium 38 Sr 87.62	57-70 Lanthanides * 71 Lu 174.97	72 Hafnium 72 Hf 178.49	73 Tantalum 73 Ta 180.95	74 Tungsten 74 W 183.84	75 Rhenium 75 Re 186.21	76 Osmium 76 Os 190.23	77 Iridium 77 Ir 192.22	78 Platinum 78 Pt 195.08	79 Gold 79 Au 196.97	80 Mercury 80 Hg 200.59	81 Thallium 81 Tl 204.38	82 Lead 82 Pb 207.20	83 Bismuth 83 Bi 208.98	84 Polonium 84 Po (209)	85 Astatine 85 At (210)	86 Radon 86 Rn (222)
55 Cesium 55 Cs 132.91	56 Barium 56 Ba 137.33	89-102 Actinides ** 103 Lr (262)	104 Rutherfordium 104 Rf (267)	105 Dubnium 105 Db (268)	106 Seaborgium 106 Sg (271)	107 Bohrium 107 Bh (272)	108 Hassium 108 Hs (270)	109 Meitnerium 109 Mt (276)	110 Darmstadtium 110 Ds (281)	111 Roentgenium 111 Rg (280)	112 Copernicium 112 Cn (285)	113 Uut (284)	114 Uuq (289)	115 Uup (288)	116 Uuh (293)	117 Uus (294?)	118 Uuo (294)

-  Alkali Metals
-  Alkaline Earth Metals
-  Transition Metals
-  Other Metals
-  Rare Earth Metals
-  Metalloids/ Semimetals
-  Other Non-metals
-  Halogens
-  Noble Gases

*lanthanides

**actinides

57 Lanthanum 138.91	58 Cerium 140.12	59 Praseodymium 140.91	60 Neodymium 144.24	61 Promethium (145)	62 Samarium 150.36	63 Europium 151.97	64 Gadolinium 157.25	65 Terbium 158.93	66 Dysprosium 162.50	67 Holmium 164.93	68 Erbium 167.26	69 Thulium 168.93	70 Ytterbium 173.04
89 Actinium (227)	90 Thorium 232.04	91 Protactinium 231.04	92 Uranium 238.03	93 Neptunium (237)	94 Plutonium (244)	95 Americium (243)	96 Curium (247)	97 Berkelium (247)	98 Californium (251)	99 Einsteinium (252)	100 Fermium (257)	101 Mendelevium (258)	102 Nobelium (259)

Polonium sometimes considered an other metal, sometimes a metalloid/ semimetal. Astatine sometimes a metalloid sometimes a halogen. No big deal, its weird!