



Periodic Table 101 Guided video notes

Organization of the Elements

- Periodic Table 1st organized by _____ in the 1860's
 - There were only _____ known elements.
 - First organized by _____ and _____ now by _____
 - There were gaps in the table because other _____ had not yet been discovered.

Periodic Law

- Elements are organized by _____ and similar _____
- Also organized by metals, _____
 - **Metals** tend to be _____ at room temperature
 - **Nonmetals** tend to be _____ at room temperature
 - Exception – Hydrogen is a _____ at room temperature
 - **Metalloids** are also called _____
 - have properties of _____

Periods

- Each row is called a _____
- From _____ elements become less _____ as you go across the _____

Groups

- Each column is called a _____
- Each group has the same number of _____
- Because of the valence electrons each group has similar chemical _____
 - (Valence electrons & _____)

Now flip over to the back and follow the instructions I give in the video to setup and customize your periodic table.

Periodic Table																	
1 H Hydrogen 1.01																	18 He Helium 4.00
3 Li Lithium 6.94	4 Be Beryllium 9.01											13 B Boron 10.81	14 C Carbon 12.01	15 N Nitrogen 14.01	16 O Oxygen 16.00	17 F Fluorine 19.00	10 Ne Neon 20.18
11 Na Sodium 22.99	12 Mg Magnesium 24.31											13 Al Aluminum 26.98	14 Si Silicon 28.09	15 P Phosphorus 30.97	16 S Sulfur 32.07	17 Cl Chlorine 35.45	18 Ar Argon 39.95
19 K Potassium 39.10	20 Ca Calcium 40.08	21 Sc Scandium 44.96	22 Ti Titanium 47.87	23 V Vanadium 50.94	24 Cr Chromium 52.00	25 Mn Manganese 54.94	26 Fe Iron 55.85	27 Co Cobalt 58.93	28 Ni Nickel 58.69	29 Cu Copper 63.55	30 Zn Zinc 65.39	31 Ga Gallium 69.72	32 Ge Germanium 72.61	33 As Arsenic 74.92	34 Se Selenium 78.96	35 Br Bromine 79.90	36 Kr Krypton 83.80
37 Rb Rubidium 85.47	38 Sr Strontium 87.62	39 Y Yttrium 88.91	40 Zr Zirconium 91.22	41 Nb Niobium 92.91	42 Mo Molybdenum 95.94	43 Tc Technetium (98)	44 Ru Ruthenium 101.07	45 Rh Rhodium 102.91	46 Pd Palladium 106.42	47 Ag Silver 107.87	48 Cd Cadmium 112.41	49 In Indium 114.82	50 Sn Tin 118.71	51 Sb Antimony 121.76	52 Te Tellurium 127.60	53 I Iodine 126.90	54 Xe Xenon 131.29
55 Cs Cesium 132.91	56 Ba Barium 137.33	57-71 ★	72 Hf Hafnium 178.49	73 Ta Tantalum 180.95	74 W Tungsten 183.84	75 Re Rhenium 186.21	76 Os Osmium 190.23	77 Ir Iridium 192.22	78 Pt Platinum 195.08	79 Au Gold 196.97	80 Hg Mercury 200.59	81 Tl Thallium 204.38	82 Pb Lead 207.2	83 Bi Bismuth 208.98	84 Po Polonium (209)	85 At Astatine (210)	86 Rn Radon (222)
87 Fr Francium (223)	88 Ra Radium (226)	89-103 ★★	104 Rf Rutherfordium (261)	105 Db Dubnium (262)	106 Sg Seaborgium (266)	107 Bh Bohrium (264)	108 Hs Hassium (269)	109 Mt Meitnerium (268)	110 Ds Darmstadtium (261)	111 Rg Roentgenium (272)	112 Cn Copernicium (285)	113 Uut Ununtrium (284)	114 Fl Flerovium (289)	115 Uup Ununpentium (288)	116 Lv Livermorium (293)	117 Uus Ununseptium (294)	118 Uuo Ununoctium (294)
★ Lanthanide series		57 La Lanthanum 138.91	58 Ce Cerium 140.12	59 Pr Praseodymium 140.91	60 Nd Neodymium 144.24	61 Pm Promethium (145)	62 Sm Samarium 150.36	63 Eu Europium 151.96	64 Gd Gadolinium 157.25	65 Tb Terbium 158.93	66 Dy Dysprosium 162.50	67 Ho Holmium 164.93	68 Er Erbium 167.26	69 Tm Thulium 168.93	70 Yb Ytterbium 173.04	71 Lu Lutetium 174.97	
★★ Actinide series		89 Ac Actinium (227)	90 Th Thorium 232.04	91 Pa Protactinium 231.04	92 U Uranium 238.03	93 Np Neptunium (237)	94 Pu Plutonium (244)	95 Am Americium (243)	96 Cm Curium (247)	97 Bk Berkelium (247)	98 Cf Californium (251)	99 Es Einsteinium (252)	100 Fm Fermium (257)	101 Md Mendelevium (258)	102 No Nobelium (259)	103 Lr Lawrencium (262)	

Group Names: Group 1 = Alkali metals Group 2 = Alkaline earth metals,
 Group 3-11 = Transition metals Group 13 = The Boron family Group 14 = The Carbon family
 Group 15 = The Nitrogen family Group 16 = The Oxygen family Group 17= The Halogens
 Group 18 = The Noble Gases

Periodic Table Quiz

1. What is the periodic table 1st arranged by? _____
2. Who invented the periodic table? _____
3. Why were there gaps in the periodic table? _____
4. What two things do elements in the same group have in common? _____
5. Elements become less _____ as you move from left to right on the periodic table.
6. The three main types of elements on the periodic table are _____
7. Another name for metalloids is _____
8. Each row on the periodic table is called a _____

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