

Welcome! Please grab your ISN and have a seat!  
Please finish the research assignment in your Google classroom for the Do Now



Sep 21-11:16 AM

WWK

*groups*- (families) columns in the periodic table — every element in the same group has the same number of valence electrons.

*periods*- rows in the periodic table- every element in the same row has the same # electron energy shells.

Sep 21-7:46 AM

# TOC pg 39-40 Periodic Table

\*In 1869, Dimitri Mendeleev organized elements into the periodic table

1	1 H 1.008 Hydrogen	2 He 4.003 Helium																
2	3 Li 6.941 Lithium	4 Be 9.012 Beryllium											5 B 10.812 Boron	6 C 12.011 Carbon	7 N 14.007 Nitrogen	8 O 15.999 Oxygen	9 F 18.998 Fluorine	10 Ne 20.180 Neon
3	11 Na 22.990 Sodium	12 Mg 24.305 Magnesium											13 Al 26.982 Aluminum	14 Si 28.086 Silicon	15 P 30.974 Phosphorus	16 S 32.066 Sulfur	17 Cl 35.453 Chlorine	18 Ar 39.948 Argon
4	19 K 39.098 Potassium	20 Ca 40.078 Calcium	21 Sc 44.956 Scandium	22 Ti 47.867 Titanium	23 V 50.942 Vanadium	24 Cr 51.996 Chromium	25 Mn 54.938 Manganese	26 Fe 55.845 Iron	27 Co 58.933 Cobalt	28 Ni 58.693 Nickel	29 Cu 63.546 Copper	30 Zn 65.38 Zinc	31 Ga 69.723 Gallium	32 Ge 72.64 Germanium	33 As 74.922 Arsenic	34 Se 78.96 Selenium	35 Br 79.904 Bromine	36 Kr 83.798 Krypton
5	37 Rb 85.468 Rubidium	38 Sr 87.62 Strontium	39 Y 88.906 Yttrium	40 Zr 91.224 Zirconium	41 Nb 92.906 Niobium	42 Mo 95.96 Molybdenum	43 Tc (98) Technetium	44 Ru 101.07 Ruthenium	45 Rh 102.906 Rhodium	46 Pd 106.42 Palladium	47 Ag 107.868 Silver	48 Cd 112.412 Cadmium	49 In 114.818 Indium	50 Sn 118.711 Tin	51 Sb 121.760 Antimony	52 Te 127.60 Tellurium	53 I 126.904 Iodine	54 Xe 131.294 Xenon
6	55 Cs 132.905 Cesium	56 Ba 137.328 Barium	71 Lu 174.967 Lutetium	72 Hf 178.49 Hafnium	73 Ta 180.948 Tantalum	74 W 183.84 Tungsten	75 Re 186.207 Rhenium	76 Os 190.23 Osmium	77 Ir 192.217 Iridium	78 Pt 195.085 Platinum	79 Au 196.967 Gold	80 Hg 200.59 Mercury	81 Tl 204.383 Thallium	82 Pb 207.2 Lead	83 Bi 208.980 Bismuth	84 Po (209) Polonium	85 At (210) Astatine	86 Rn (222) Radon
7	87 Fr (223) Francium	88 Ra (226) Radium	103 Lr (262) Lawrencium	104 Rf (267) Rutherfordium	105 Db (268) Dubnium	106 Sg (271) Seaborgium	107 Bh (272) Bohrium	108 Hs (270) Hassium	109 Mt (276) Meitnerium	110 Ds (281) Darmstadtium	111 Rg (280) Roentgenium	Mass numbers in parentheses are those of the most stable or most common isotope.						

Lanthanide Series	57 La 138.905 Lanthanum	58 Ce 140.116 Cerium	59 Pr 140.908 Praseodymium	60 Nd 144.242 Neodymium	61 Pm (145) Promethium	62 Sm 150.36 Samarium	63 Eu 151.964 Europium	64 Gd 157.25 Gadolinium	65 Tb 158.925 Terbium	66 Dy 162.500 Dysprosium	67 Ho 164.930 Holmium	68 Er 167.259 Erbium	69 Tm 168.934 Thulium	70 Yb 173.055 Ytterbium
Actinide Series	89 Ac (227) Actinium	90 Th 232.038 Thorium	91 Pa 231.036 Protactinium	92 U 238.029 Uranium	93 Np (237) Neptunium	94 Pu (244) Plutonium	95 Am (243) Americium	96 Cm (247) Curium	97 Bk (247) Berkelium	98 Cf (251) Californium	99 Es (252) Einsteinium	100 Fm (257) Fermium	101 Md (258) Mendelevium	102 No (259) Nobelium

Sep 21-8:00 AM

# Groups

- also called families
- 18 total groups
- elements in the same group have the same # valence electrons

Sep 21-11:15 AM

# Periods

- rows in table
- 7 total periods
- elements in the same period have the same # electron shells

Sep 21-11:15 AM

• Color the Alkali Metals  
Pink

## ALKALI METALS

1	1A	1	2	3A	4A	5A	6A	7A	8A	18								
1	H	He																
2	Li	Be		B	C	N	O	F	Ne									
3	Na	Mg		Al	Si	P	S	Cl	Ar									
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
6	Cs	Ba	La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg							

57	58	59	60	61	62	63	64	65	66	67	68	69	70
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
138.905	140.116	140.908	144.242	(145)	150.36	151.964	157.25	158.925	162.500	164.930	167.259	168.934	173.055
Lanthanum	Cerium	Praseodymium	Neodymium	Promethium	Samarium	Europium	Gadolinium	Terbium	Dysprosium	Holmium	Erbium	Thulium	Ytterbium
89	90	91	92	93	94	95	96	97	98	99	100	101	102
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No
(227)	232.038	231.036	238.029	(237)	(244)	(243)	(247)	(247)	(251)	(252)	(257)	(258)	(259)
Actinium	Thorium	Protactinium	Uranium	Neptunium	Plutonium	Americium	Curium	Berkelium	Californium	Einsteinium	Fermium	Mendelevium	Nobelium

Sep 21-7:43 AM

# Alkaline Earth Metals

- Color the Alkaline Earth Metals lime green.

Atomic number: 14  
Symbol: Si  
Atomic mass: 28.086  
Name: Silicon

Lanthanide Series  
Actinide Series

1	1A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H	He																
2	Li	Be											B	C	N	O	F	Ne
3	Na	Mg											Al	Si	P	S	Cl	Ar
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
6	Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg							

Sep 21-8:08 AM

# TRANSITION METALS

- Color the Transition Metals YELLOW.

Atomic number: 14  
Symbol: Si  
Atomic mass: 28.086  
Name: Silicon

Lanthanide Series  
Actinide Series

1	1A	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	H	He																
2	Li	Be											B	C	N	O	F	Ne
3	Na	Mg											Al	Si	P	S	Cl	Ar
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
6	Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
7	Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg							

Sep 21-8:10 AM

# Poor Metals

• COLOR THE POOR METALS LIGHT BLUE.

1A		2A-10A										11A-12A		13A	14A-15A		16A-17A		18A																																	
1	H	2	Li	Be	3	Na	4	Mg	5	Al	6	Si	7	P	8	S	9	Cl	10	Ar	11	K	12	Ca	13	Sc	14	Ti	15	V	16	Cr	17	Mn	18	Fe	19	Cu	20	Zn	21	Ga	22	Ge	23	As	24	Se	25	Br	26	Kr

**Poor Metals (Light Blue):** Al, Si, Ga, Ge, In, Sn, Tl, Pb, Bi, Po

**Other Metals (Light Blue):** Fe, Ni, Cu, Zn

**Nonmetals (Purple):** B, C, N, O, F, Ne, Ar, Kr, Xe, Rn

**Other Nonmetals:** H, Li, Be, Na, Mg, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Cs, Ba, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, Fr, Ra, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No

Sep 21-8:10 AM

# Nonmetals

• Color the Nonmetals Purple.

1A		2A-10A										11A-12A		13A	14A-15A		16A-17A		18A																																	
1	H	2	Li	Be	3	Na	4	Mg	5	Al	6	Si	7	P	8	S	9	Cl	10	Ar	11	K	12	Ca	13	Sc	14	Ti	15	V	16	Cr	17	Mn	18	Fe	19	Cu	20	Zn	21	Ga	22	Ge	23	As	24	Se	25	Br	26	Kr

**Nonmetals (Purple):** B, C, N, O, F, Ne, Ar, Kr, Xe, Rn

**Other Nonmetals:** H, Li, Be, Na, Mg, K, Ca, Sc, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, As, Se, Br, Kr, Rb, Sr, Y, Zr, Nb, Mo, Tc, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Xe, Cs, Ba, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Pb, Bi, Po, At, Rn, Fr, Ra, Ac, Th, Pa, U, Np, Pu, Am, Cm, Bk, Cf, Es, Fm, Md, No

Sep 21-8:11 AM

# Noble Gases

- Color the Noble Gases Orange.

Atomic number: 14  
Symbol: Si  
Atomic mass: 28.086  
Name: Silicon

Lanthanide Series  
Actinide Series

1 1A 1 H 1.008 Hydrogen	2 2A 3 Li 6.941 Lithium	4 4 Be 9.012 Beryllium	5 3B 11 Na 22.990 Sodium	6 4B 12 Mg 24.305 Magnesium	7 5B 19 K 39.098 Potassium	8 6B 20 Ca 40.078 Calcium	9 7B 21 Sc 44.956 Scandium	10 8B 22 Ti 47.867 Titanium	11 9 23 V 50.942 Vanadium	12 10 24 Cr 51.996 Chromium	13 11B 25 Mn 54.938 Manganese	14 12B 26 Fe 55.845 Iron	15 13 27 Co 58.933 Cobalt	16 14A 28 Ni 58.693 Nickel	17 15A 29 Cu 63.546 Copper	18 16A 30 Zn 65.38 Zinc	19 3A 31 Ga 69.723 Gallium	20 4A 32 Ge 72.64 Germanium	21 5A 33 As 74.922 Arsenic	22 6A 34 Se 78.96 Selenium	23 7A 35 Br 79.904 Bromine	24 8A 36 Kr 83.798 Krypton	25 9 37 Rb 85.468 Rubidium	26 10 38 Sr 87.62 Strontium	27 3B 39 Y 88.906 Yttrium	28 4B 40 Zr 91.224 Zirconium	29 5B 41 Nb 92.906 Niobium	30 6B 42 Mo 95.96 Molybdenum	31 7B 43 Tc (98) Technetium	32 8B 44 Ru 101.07 Ruthenium	33 9 45 Rh 102.906 Rhodium	34 10 46 Pd 106.42 Palladium	35 11B 47 Ag 107.868 Silver	36 12B 48 Cd 112.412 Cadmium	37 13 49 In 114.818 Indium	38 14A 50 Sn 118.711 Tin	39 15A 51 Sb 121.760 Antimony	40 16A 52 Te 127.60 Tellurium	41 17A 53 I 126.904 Iodine	42 18A 54 Xe 131.294 Xenon	43 7 55 Cs 132.905 Cesium	44 8 56 Ba 137.328 Barium	45 3B 57 La 138.905 Lanthanum	46 4B 58 Ce 140.116 Cerium	47 5B 59 Pr 140.908 Praseodymium	48 6B 60 Nd 144.242 Neodymium	49 7B 61 Pm (145) Promethium	50 8B 62 Sm 150.36 Samarium	51 9 63 Eu 151.964 Europium	52 10 64 Gd 157.25 Gadolinium	53 11B 65 Tb 158.925 Terbium	54 12B 66 Dy 162.500 Dysprosium	55 13 67 Ho 164.930 Holmium	56 14A 68 Er 167.259 Erbium	57 15A 69 Tm 168.934 Thulium	58 16A 70 Yb 173.055 Ytterbium	49 8 87 Fr (223) Francium	50 9 88 Ra (226) Radium	51 3B 103 Lr (262) Lawrencium	52 4B 104 Rf (267) Rutherfordium	53 5B 105 Db (268) Dubnium	54 6B 106 Sg (271) Seaborgium	55 7B 107 Bh (272) Bohrium	56 8B 108 Hs (270) Hassium	57 9 109 Mt (276) Meitnerium	58 10 110 Ds (281) Darmstadtium	59 11B 111 Rg (280) Roentgenium	59 8 89 Ac (227) Actinium	60 9 90 Th 232.038 Thorium	61 10 91 Pa 231.036 Protactinium	62 11B 92 U 238.029 Uranium	63 12B 93 Np (237) Neptunium	64 13 94 Pu (244) Plutonium	65 14A 95 Am (243) Americium	66 15A 96 Cm (247) Curium	67 16A 97 Bk (247) Berkelium	68 17A 98 Cf (251) Californium	69 18A 99 Es (252) Einsteinium	70 19A 100 Fm (257) Fermium	71 20A 101 Md (258) Mendelevium	72 102 No (259) Nobelium
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Sep 21-8:12 AM

# Lanthanides

- Color the Lanthanides DARK GREEN.

Atomic number: 14  
Symbol: Si  
Atomic mass: 28.086  
Name: Silicon

Lanthanide Series  
Actinide Series

1 1A 1 H 1.008 Hydrogen	2 2A 3 Li 6.941 Lithium	4 4 Be 9.012 Beryllium	5 3B 11 Na 22.990 Sodium	6 4B 12 Mg 24.305 Magnesium	7 5B 19 K 39.098 Potassium	8 6B 20 Ca 40.078 Calcium	9 7B 21 Sc 44.956 Scandium	10 8B 22 Ti 47.867 Titanium	11 9 23 V 50.942 Vanadium	12 10 24 Cr 51.996 Chromium	13 11B 25 Mn 54.938 Manganese	14 12B 26 Fe 55.845 Iron	15 13 27 Co 58.933 Cobalt	16 14A 28 Ni 58.693 Nickel	17 15A 29 Cu 63.546 Copper	18 16A 30 Zn 65.38 Zinc	19 3A 31 Ga 69.723 Gallium	20 4A 32 Ge 72.64 Germanium	21 5A 33 As 74.922 Arsenic	22 6A 34 Se 78.96 Selenium	23 7A 35 Br 79.904 Bromine	24 8A 36 Kr 83.798 Krypton	25 9 37 Rb 85.468 Rubidium	26 10 38 Sr 87.62 Strontium	27 3B 39 Y 88.906 Yttrium	28 4B 40 Zr 91.224 Zirconium	29 5B 41 Nb 92.906 Niobium	30 6B 42 Mo 95.96 Molybdenum	31 7B 43 Tc (98) Technetium	32 8B 44 Ru 101.07 Ruthenium	33 9 45 Rh 102.906 Rhodium	34 10 46 Pd 106.42 Palladium	35 11B 47 Ag 107.868 Silver	36 12B 48 Cd 112.412 Cadmium	37 13 49 In 114.818 Indium	38 14A 50 Sn 118.711 Tin	39 15A 51 Sb 121.760 Antimony	40 16A 52 Te 127.60 Tellurium	41 17A 53 I 126.904 Iodine	42 18A 54 Xe 131.294 Xenon	43 7 55 Cs 132.905 Cesium	44 8 56 Ba 137.328 Barium	45 3B 57 La 138.905 Lanthanum	46 4B 58 Ce 140.116 Cerium	47 5B 59 Pr 140.908 Praseodymium	48 6B 60 Nd 144.242 Neodymium	49 7B 61 Pm (145) Promethium	50 8B 62 Sm 150.36 Samarium	51 9 63 Eu 151.964 Europium	52 10 64 Gd 157.25 Gadolinium	53 11B 65 Tb 158.925 Terbium	54 12B 66 Dy 162.500 Dysprosium	55 13 67 Ho 164.930 Holmium	56 14A 68 Er 167.259 Erbium	57 15A 69 Tm 168.934 Thulium	58 16A 70 Yb 173.055 Ytterbium	49 8 89 Ac (227) Actinium	50 9 90 Th 232.038 Thorium	51 10 91 Pa 231.036 Protactinium	52 11B 92 U 238.029 Uranium	53 12B 93 Np (237) Neptunium	54 13 94 Pu (244) Plutonium	55 14A 95 Am (243) Americium	56 15A 96 Cm (247) Curium	57 16A 97 Bk (247) Berkelium	58 17A 98 Cf (251) Californium	59 18A 99 Es (252) Einsteinium	60 19A 100 Fm (257) Fermium	61 20A 101 Md (258) Mendelevium	62 102 No (259) Nobelium
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Sep 21-8:13 AM

# Actinides

• Color the Actinides Brown

Atomic number: 14  
Symbol: Si  
Atomic mass: 28.086  
Name: Silicon

Lanthanide Series

Actinide Series

1	1A	2	2A											13	14	15	16	17	18	8A
1	H																			He
2	Li	Be											B	C	N	O	F	Ne		
3	Na	Mg	3	4	5	6	7	8	9	10	11	12	Al	Si	P	S	Cl	Ar		
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr		
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe		
6	Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn		
7	Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Mass numbers in parentheses are those of the most stable or most common isotope.								
			57	58	59	60	61	62	63	64	65	66	67	68	69	70				
			La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb				
			89	90	91	92	93	94	95	96	97	98	99	100	101	102				
			Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No				

Sep 21-8:14 AM

# Metalloids

• Color the Metalloids Red

Atomic number: 14  
Symbol: Si  
Atomic mass: 28.086  
Name: Silicon

Lanthanide Series

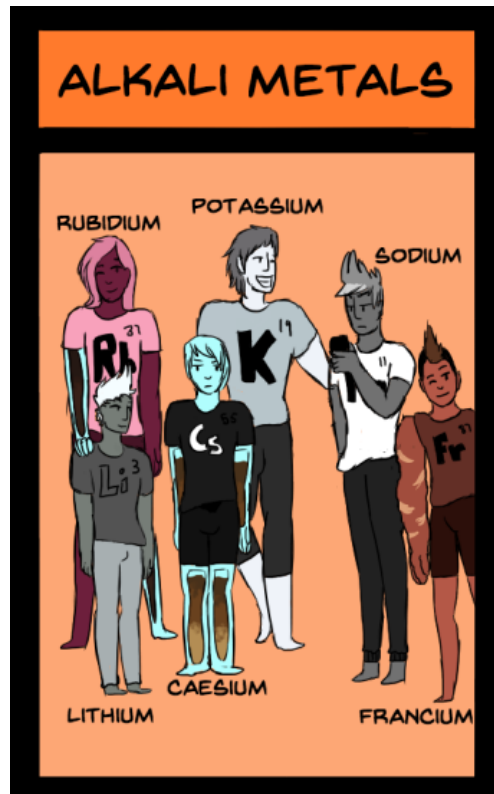
Actinide Series

1	1A	2	2A											13	14	15	16	17	18	8A	
1	H																				He
2	Li	Be											B	C	N	O	F	Ne			
3	Na	Mg	3	4	5	6	7	8	9	10	11	12	Al	Si	P	S	Cl	Ar			
4	K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr			
5	Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe			
6	Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn			
7	Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Mass numbers in parentheses are those of the most stable or most common isotope.									
			57	58	59	60	61	62	63	64	65	66	67	68	69	70					
			La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb					
			89	90	91	92	93	94	95	96	97	98	99	100	101	102					
			Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No					

Sep 21-8:14 AM

# Alkali Metals

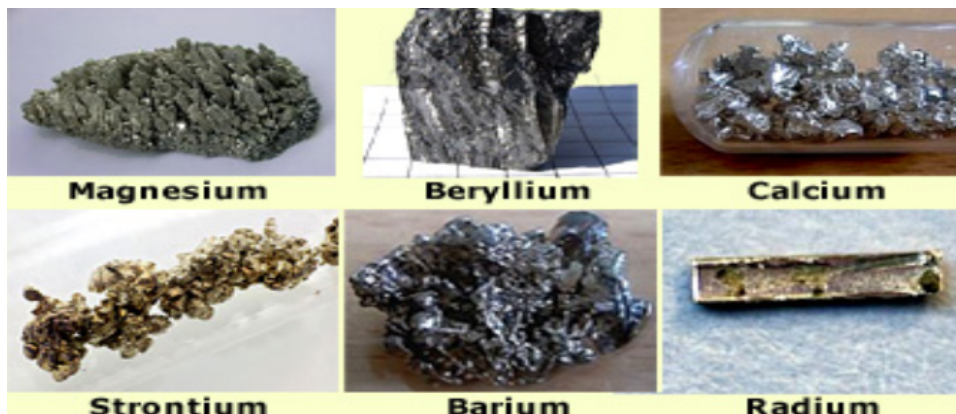
- Group 1.
- Does not include hydrogen
- Most reactive of all the metals.
- Good conductors of heat & electricity
- 1 Valence Electron.



Sep 21-8:15 AM

# ALKALINE EARTH METALS

- Group 2
- They are never found uncombined in nature.
- 2 valence electrons.
- Not as reactive as Alkali Metals.



Sep 21-10:25 AM



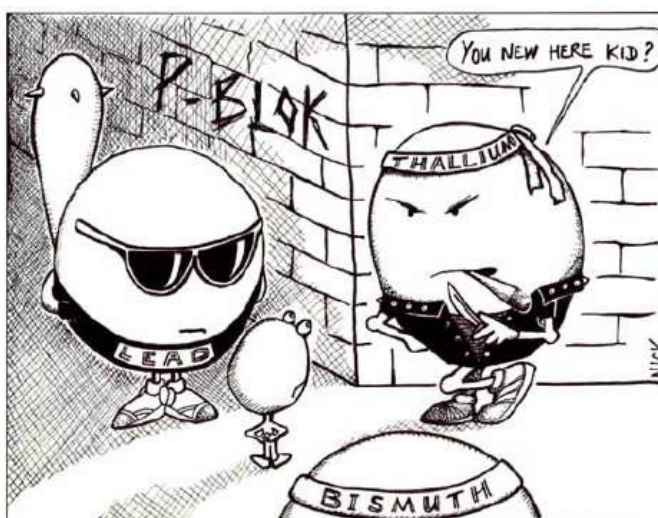
# Transition Metals

- Good conductors of heat & electricity
- Have 1 or 2 valence electrons.

Sep 21-10:28 AM

## POOR METALS

- softer than transition metals.
- melting and boiling points are lower than transition metals.



Unwittingly, and against his mother's advice, Vince the first-row Transition Metal had been lured far away from home, and now found himself surrounded by heavier elements of the P-Block.

Sep 21-10:30 AM

# Nonmetals

- Poor conductors of heat & electricity.
- Not ductile or malleable (texture)
- Brittle and dull (luster)
- Many non-metals are gas at room temperature.



Sep 21-10:32 AM

# NOBLE GASES

- Colorless gases that are extremely inactive
- Inactive- because they are stable
- 8 valence electrons (except Helium, which has 2)



Sep 21-10:34 AM

# LANTHANIDES AND ACTINIDES

- The 30 rare Earth elements.
- Most elements are synthetic, or man made.
- Any element whose atomic number is higher than 93 is synthetic or man-made
- Any element whose atomic number is higher than 84 is radioactive (think rock song by Imagine Dragons)



Sep 21-10:44 AM

# METALLOIDS

- Have properties of both metals and nonmetals.
- They are solids that can be shiny or dull (luster).
- They conduct heat & electricity better than nonmetals but not as well as metals.

32 GERMANIUM



Germanium is a semiconductor used in cell phones and other electronics.

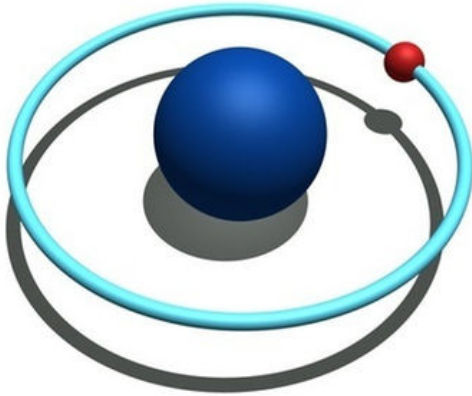
Ge

Sep 21-10:54 AM

# Hydrogen

it's a hard knock life...

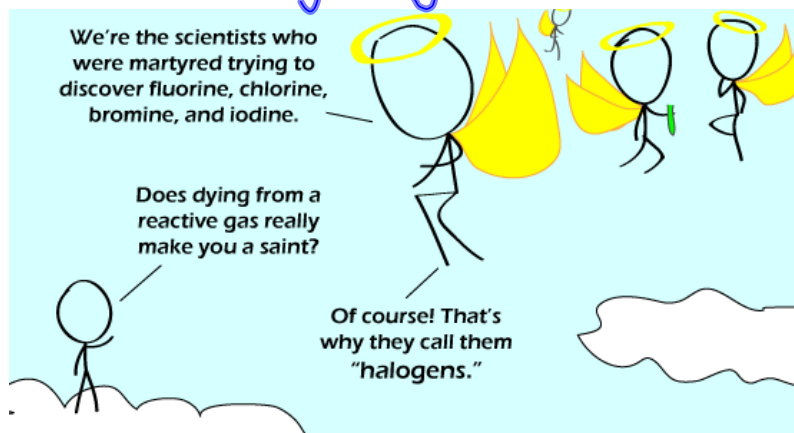
- It's a gas at room temperature.
- It has one proton and one electron, but no neutrons.
- Hydrogen belongs to NO family. ← ORPHAN!



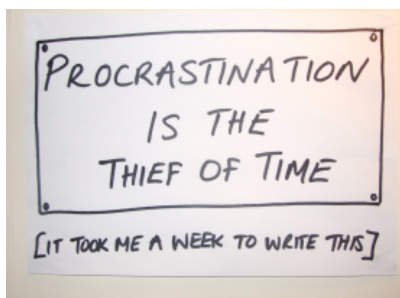
Sep 21-10:57 AM

# Halogens

- **group** 17
- 7 **valence electrons**
- highly **reactive**
- **combines with** hydrogen **to produce acids.**



Sep 21-10:59 AM



### PERIODIC TABLE PROJECT

1. **Draw** a complete periodic table that covers a half sheet of poster board **(NOT A FULL PIECE!!!!!!)**
2. Must have a title.
3. Fill in the following information for every element.  
Name of element (spelled correctly)  
Symbol of element (abbreviated correctly)  
Atomic number  
Average Atomic mass
4. Label periods 1-7 and groups 1-18.
5. Provide a key that indicates what each item in each block represents.
6. Color code and use another key to indicate common groups or other commonalities among elements on your periodic table. *There are numerous examples on the internet. It is your responsibility to do enough research to ensure that the information on your periodic table is correct.*
7. Lines must be straight and the overall periodic table must be neatly carried out. Overall work must be spaced out appropriately - should not look like you ran out of room.
8. Your periodic table CANNOT be printed- it all must be originally done!!!
9. These instructions must be taped to the back of the project.

DUE DATE:

At the beginning of class on October 3rd

I expect your project to be complete when you bring it on the due date. This means that you are not to come to class and ask to use glue, tape, markers, scissors, etc in order to finish it.

Sep 21-11:54 AM

On the other half of your poster board, pick an element that starts with the SAME letter as your first name.

1. Give the element from the periodic table and label all the important information (see your ISN page 38 for information)
2. Answer the following questions somewhere on the poster. DO NOT print these off and answer them that way.
3. Be Creative!!!!!! Be Colorful!!!!!! Be Motivated!!!
4. DO NOT WAIT UNTIL THE LAST MINUTE!!!

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**Student Name:**

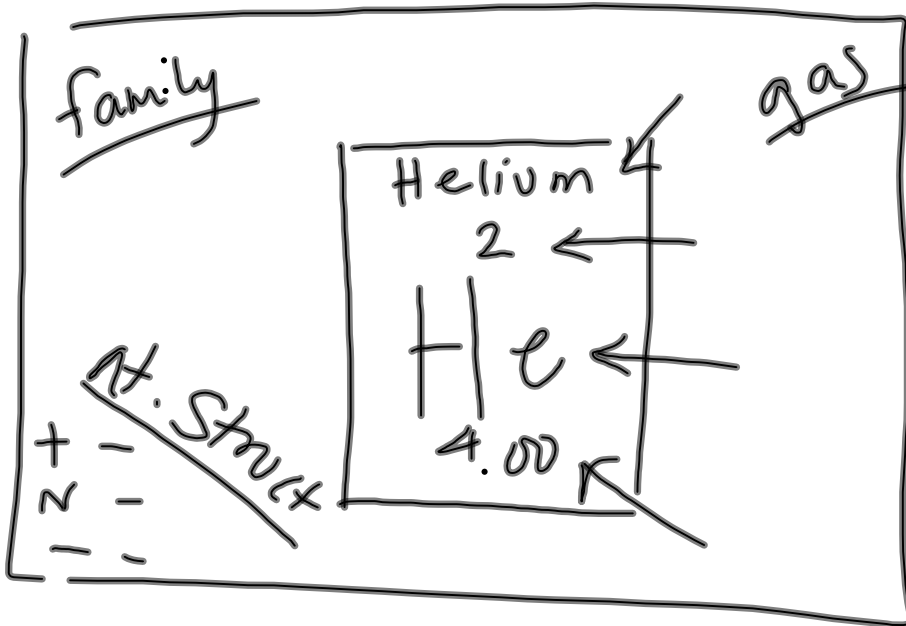
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**Element Name:**

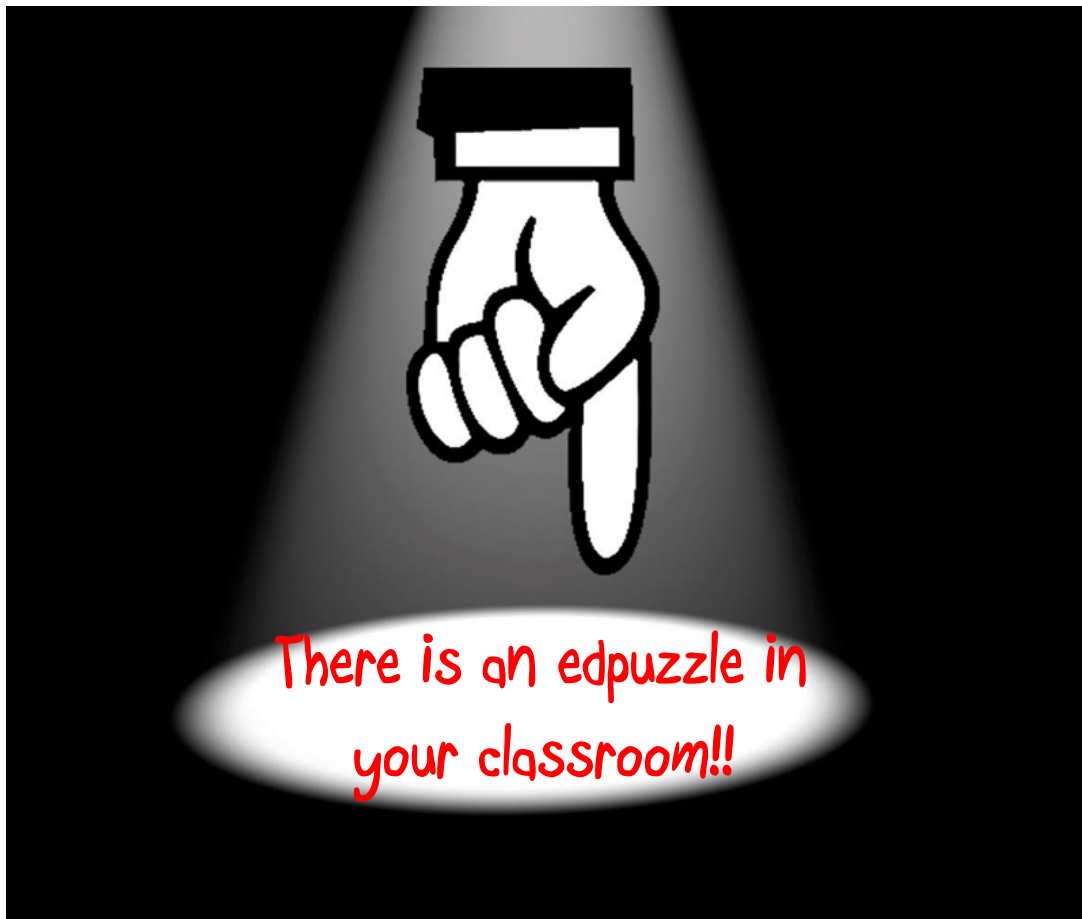
Explore the Core Concepts: Periodic Table database to complete the following tasks and find the following information about your assigned element.

1. What is the element's symbol?
2. To what family does the element belong? (For example, is it a noble gas, an alkali metal, or something else?)
3. Describe the atomic structure of the element: how many protons, neutrons, electrons, and electron shells does an atom of this element have?
4. What is the element's state of matter (solid, liquid, or gas)?
5. What is the element's atomic weight?
6. Where can the element be found in the natural world, in the human body, or in products you use?
7. What are some properties of the element? (For example, does it conduct electricity? It is odorless? What color is it?)
8. When was the element discovered? Who discovered it?
9. If there is a video available, watch the video about the element. List at least 2 things you learned from the video.
10. List at least three interesting facts about this element.

Sep 21-11:54 AM



Sep 21-12:09 PM



Sep 22-9:28 AM



- $R_m 4$  has 2 energy levels
- $R_m 7$  has 5 valence electrons
- $R_m 8$  is in Period 3
- $R_m 10$  has 12 neutrons
- $R_m 12$  the amu is based on me
- $R_m 16$  is a halogen
- $R_m 17$  has one more proton than  $R_m 10$

Sep 22-9:52 AM