

Periodic Table Activities

Friday, February 2, 2018 11:38 AM



Periodic Table Activities

The Periodic Table of the Elements

Periodic Table of the Elements

													<table border="1"> <tr> <td>79</td> <td colspan="2">Number of Electrons in Shells</td> </tr> <tr> <td>Au</td> <td>2</td> <td>8</td> </tr> <tr> <td>196.967</td> <td>18</td> <td>32</td> </tr> <tr> <td>118</td> <td>50</td> <td>18</td> </tr> <tr> <td></td> <td>10</td> <td>2</td> </tr> <tr> <td></td> <td>2</td> <td>1</td> </tr> <tr> <td></td> <td>1</td> <td>0</td> </tr> <tr> <td></td> <td>0</td> <td>0</td> </tr> </table>					79	Number of Electrons in Shells		Au	2	8	196.967	18	32	118	50	18		10	2		2	1		1	0		0	0
79	Number of Electrons in Shells																																								
Au	2	8																																							
196.967	18	32																																							
118	50	18																																							
	10	2																																							
	2	1																																							
	1	0																																							
	0	0																																							
1																	18																								
H 1.008 Hydrogen																	He 4.003 Helium																								
3	4											13	14	15	16	17	18																								
Li 6.941 Lithium	Be 9.012 Beryllium											B 10.811 Boron	C 12.011 Carbon	N 14.007 Nitrogen	O 15.999 Oxygen	F 18.992 Fluorine	Ne 20.180 Neon																								
11	12											13	14	15	16	17	18																								
Na 22.990 Sodium	Mg 24.305 Magnesium											Al 26.982 Aluminum	Si 28.086 Silicon	P 30.974 Phosphorus	S 32.064 Sulfur	Cl 35.453 Chlorine	Ar 39.948 Argon																								
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36																								
K 39.098 Potassium	Ca 40.078 Calcium	Sc 44.956 Scandium	Ti 47.88 Titanium	V 50.942 Vanadium	Cr 51.996 Chromium	Mn 54.938 Manganese	Fe 55.845 Iron	Co 58.933 Cobalt	Ni 58.693 Nickel	Cu 63.546 Copper	Zn 65.39 Zinc	Ga 69.723 Gallium	Ge 72.61 Germanium	As 74.922 Arsenic	Se 78.96 Selenium	Br 79.904 Bromine	Kr 84.80 Krypton																								
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54																								
Rb 84.464 Rubidium	Sr 87.62 Strontium	Y 88.906 Yttrium	Zr 91.224 Zirconium	Nb 92.906 Niobium	Mo 95.94 Molybdenum	Tc 98.906 Technetium	Ru 101.07 Ruthenium	Rh 102.905 Rhodium	Pd 106.42 Palladium	Ag 107.868 Silver	Cd 112.411 Cadmium	In 114.818 Indium	Sn 118.710 Tin	Sb 121.760 Antimony	Te 127.6 Tellurium	I 126.905 Iodine	Xe 131.29 Xenon																								
55	56	57-71		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86																							
Cs 132.905 Cesium	Ba 137.327 Barium	Lanthanide Series		Hf 178.49 Hafnium	Ta 180.948 Tantalum	W 183.85 Tungsten	Re 186.207 Rhenium	Os 190.23 Osmium	Ir 192.22 Iridium	Pt 195.084 Platinum	Au 196.967 Gold	Hg 200.59 Mercury	Tl 204.384 Thallium	Pb 207.2 Lead	Bi 208.980 Bismuth	Po [209] Polonium	At [210] Astatine	Rn [222] Radon																							
87	88	89-103		104	105	106	107	108	109	110	111	112	113	114	115	116	117	118																							
Fr 223.021 Francium	Ra 226.025 Radium	Actinide Series		Rf [261] Rutherfordium	Db [262] Dubnium	Sg [263] Seaborgium	Bh [264] Bohrium	Hs [265] Hassium	Mt [266] Meitnerium	Ds [269] Darmstadtium	Rg [271] Roentgenium	Cn [273] Copernicium	Uut [277] Ununtrium	Fl [279] Flerovium	Uup [285] Ununpentium	Uuq [289] Ununquadium	Uus [293] Ununseptium	Uuo [294] Ununoctium																							
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71																											
La 138.905 Lanthanum	Ce 140.12 Cerium	Pr 140.908 Praseodymium	Nd 144.24 Neodymium	Pm [145] Promethium	Sm 150.36 Samarium	Eu 151.964 Europium	Gd 157.25 Gadolinium	Tb 158.925 Terbium	Dy 162.50 Dysprosium	Ho 164.930 Holmium	Er 167.26 Erbium	Tm 168.934 Thulium	Yb 173.04 Ytterbium	Lu 174.967 Lutetium																											
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103																											
Ac 227.028 Actinium	Th 232.038 Thorium	Pa 231.036 Protactinium	U 238.029 Uranium	Np 237.048 Neptunium	Pu 244.064 Plutonium	Am 243.061 Americium	Cm 247.070 Curium	Bk 247.070 Berkelium	Cf 251.080 Californium	Es 252.083 Einsteinium	Fm 257.085 Fermium	Md 258.10 Mendelevium	No 259.101 Nobelium	Lr [262] Lawrencium																											

Getting Re-acquainted booklet

Name:

Period:

DATE:

NAME:

CLASS:

**CHAPTER 5
REINFORCEMENT****Reviewing Element Names
and Symbols****BLM 5-1**

Goal • Review the names and symbols of various elements by finding them in the periodic table.

What to Do

Complete the following tables. Refer to the periodic table in Appendix C of your textbook.

1. Write the full name of the element beside each symbol.

Symbol	Element name	Symbol	Element name
Cl	Chlorine	Ca	Calcium
C	Carbon	Mg	Magnesium
Ne	Neon	Si	Silicon
N	Nitrogen	S	Sulfur
He	Helium	P	Phosphorus
F	Fluorine	K	Potassium

2. Write the correct symbol next to the name of each element.

Element name	Symbol	Element name	Symbol
sodium	Na	gold	Au
lithium	Li	silver	Ag
aluminum	Al	copper	Cu
boron	B	cobalt	Co

DATE:

NAME:

CLASS:

CHAPTER 5
SKILL BUILDER

BLM 5.2

Periodic Table Scavenger Hunt

Goal • Gain further understanding of the periodic table.

What to Do

Answer each question in the space provided. Refer to the periodic table in Appendix C of your textbook.

- (a) How many periods does the periodic table have? 7 (rows)

(b) How many groups does the periodic table have? 18 (columns)
- (a) Where are the metals found in the periodic table? left side

(b) Where are the non-metals found in the periodic table? right side
- (a) Which elements are found around the "staircase" of the periodic table? metalloids

(b) Why are these elements at the "staircase" special? they share properties with both metals and non-metals
- Which metal is a liquid at room temperature? Mercury
- What does the atomic number represent? the number of protons in atom's nucleus
- What does the atomic mass represent? the weight or mass of one atom of that element

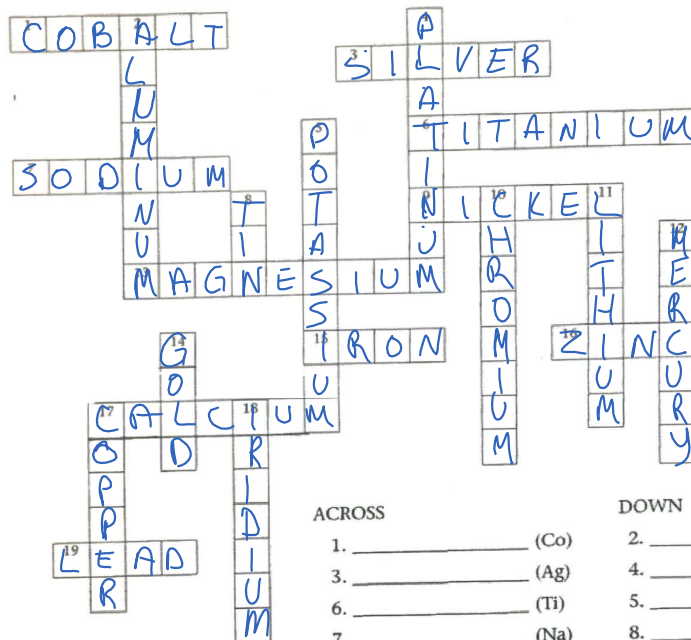
Name _____

Date _____



Activity 4: The Metals Crossword

Directions: Use the chemical symbols given in the "Across" and "Down" clues to determine each element name. Write the element name on the line by the chemical symbol for each metal. Then write the element name in the puzzle.



ACROSS

1. _____ (Co)
3. _____ (Ag)
6. _____ (Ti)
7. _____ (Na)
9. _____ (Ni)
13. _____ (Mg)
15. _____ (Fe)
16. _____ (Zn)
17. _____ (Ca)
19. _____ (Pb)

DOWN

2. _____ (Al)
4. _____ (Pt)
5. _____ (K)
8. _____ (Sn)
10. _____ (Cr)
11. _____ (Li)
12. _____ (Hg)
14. _____ (Au)
17. _____ (Cu)
18. _____ (Ir)

Name _____ Date _____



Activity 13: Elemental Math

Directions: Replace the symbol for each element below with the correct atomic number. Then complete the equation. Finally, translate the answer back into the element symbol.

Example: $H + He = \underline{\quad}$ would be calculated as $1 + 2 = 3$. 3 is the atomic number for lithium, so the equation would be $H + He = \underline{Li}$.

1. $Cl + He = \underline{K (19)}$
 2. $Tc + Ag - Ne = \underline{Hg (80)}$
 3. $(H + Br) \div Li = \underline{Mg (12)}$
 4. $(Cs + Pa) \div He = \underline{Ta (73)}$
 5. $Na \times Be + C = \underline{Sn (50)}$
 6. $Re + (Sc + Be) = \underline{Li (3)}$
 7. $Fm + Mn \times Be = \underline{S (16)}$
 - *8. $In + N \times B + Es - Mn = \underline{Mt (109)}$
 9. $C^{He} \times Ne + Mg = \underline{Zn (30)}$
 10. $Te + Xe - Sg + As + Pd = \underline{Au (79)}$
 11. $(Pm - Sb) \times O + F = \underline{Ac (89)}$
 - *12. $[(Zr + Ge) \div F] + [Xe + C \times Li - Mg] = \underline{V (23)}$
- $49 \div 7 \times 5 + 99 - 25$



Name _____ Date _____



Activity 16: Unusual Element Symbols

Eleven elements have names that are unlike their symbols. This is because ten of the symbols are based on Latin words, and one is based on a German name (see example). By decoding the numbers below, you can find the Latin names for these symbols.

Directions: Number the letters of the alphabet from 1 to 26. For example, A is 1, B is 2, etc. Then write the letter each number represents on the line above that number. After you are finished decoding the numbers, write the common element name next to its symbol.

	SYMBOL	ELEMENT	GERMAN NAME
Example:	W	<u>tungsten</u>	W O L F R A M 23 15 12 6 18 1 13

SYMBOL	ELEMENT	LATIN NAME
1. Ag	<u>Silver</u>	A R G E N T U M 1 18 7 5 14 20 21 13
2. Au	<u>Gold</u>	A U R U M 1 21 18 21 13
3. Cu	<u>Copper</u>	C U P R U M 3 21 16 18 21 13
4. Fe	<u>Iron</u>	F E R R U M 6 5 18 18 21 13
5. Hg	<u>Mercury</u>	H Y D R A R G Y R U M 8 25 4 18 1 18 7 25 18 21 13
6. K	<u>Potassium</u>	K A L I U M 11 1 12 9 21 13
7. Na	<u>Sodium</u>	N A T R I U M 14 1 20 18 9 21 13
8. Pb	<u>Lead</u>	P L U M B U M 16 12 21 13 2 21 13
9. Sn	<u>Tin</u>	S T A N N U M 19 20 1 14 14 21 13
10. Sb	<u>Antimony</u>	S T I B I U M 19 20 9 2 9 21 13