

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## *Periodic Table Scavenger Hunt*

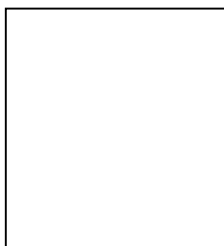
### **Objectives:**

1. SWBAT use the periodic table to name elements, given their symbols.
2. SWBAT use the periodic table to write the symbols of elements, given their names
3. SWBAT describe the arrangement of the periodic table
4. SWBAT list the characteristics that distinguish metals, nonmetals and metalloids.
5. SWBAT efficiently use their text book to gain information.

### **Directions:**

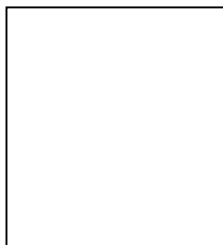
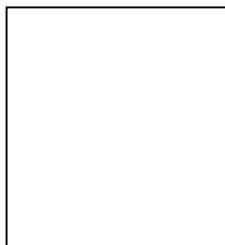
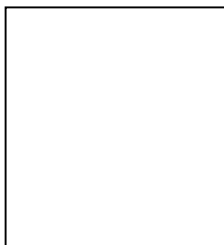
Use the periodic table of elements and your text book to explore and learn to use the periodic table.

To answer each of the questions below, draw the **atomic number**, **chemical symbol** and **element name** in the boxes provided.

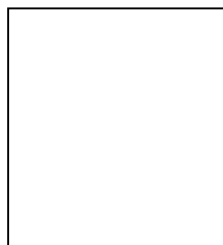
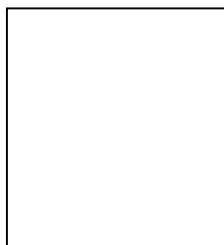


### **Section 1: Names and Symbols**

1. Find at least 3 elements named after countries



2. Find at least 3 elements named after scientists (and name the scientist)



3. Find 1 element named after a state and one named after a continent

4. Find 3 elements named after planets

5. Find 1 element that sounds like your name and 1 that sounds like it should be in a comic book

6. Find at least 5 elements whose symbols **do not** match their names

7. What is the only letter **not** appearing on the periodic table as a symbol or part of the symbol?

## Section 2: Families and Periods

### **Define:**

1. Families:
2. Periods –

**Without repeating the elements you found above, answer the following questions:**

3. Find three elements in the same family

4. Find three elements in the same period

## Section 3: Types of Elements

hydrogen 1 <b>H</b> 1.0079																		helium 2 <b>He</b> 4.0026					
lithium 3 <b>Li</b> 6.941	beryllium 4 <b>Be</b> 9.0122	Key: element name <b>atomic number</b> <b>symbol</b> atomic weight (mean relative mass)																boron 5 <b>B</b> 10.811	carbon 6 <b>C</b> 12.011	nitrogen 7 <b>N</b> 14.007	oxygen 8 <b>O</b> 15.999	fluorine 9 <b>F</b> 18.998	neon 10 <b>Ne</b> 20.180
sodium 11 <b>Na</b> 22.990	magnesium 12 <b>Mg</b> 24.305	scandium 21 <b>Sc</b> 44.956	titanium 22 <b>Ti</b> 47.867	vanadium 23 <b>V</b> 50.942	chromium 24 <b>Cr</b> 51.996	manganese 25 <b>Mn</b> 54.938	iron 26 <b>Fe</b> 55.845	cobalt 27 <b>Co</b> 58.933	nickel 28 <b>Ni</b> 58.693	copper 29 <b>Cu</b> 63.546	zinc 30 <b>Zn</b> 65.39	gallium 31 <b>Ga</b> 69.723	germanium 32 <b>Ge</b> 72.61	arsenic 33 <b>As</b> 74.922	selenium 34 <b>Se</b> 78.96	bromine 35 <b>Br</b> 79.904	krypton 36 <b>Kr</b> 83.80						
rubidium 37 <b>Rb</b> 85.468	strontium 38 <b>Sr</b> 87.62	yttrium 39 <b>Y</b> 88.906	zirconium 40 <b>Zr</b> 91.224	niobium 41 <b>Nb</b> 92.906	molybdenum 42 <b>Mo</b> 95.94	technetium 43 <b>Tc</b> [98]	ruthenium 44 <b>Ru</b> 101.07	rhodium 45 <b>Rh</b> 102.91	palladium 46 <b>Pd</b> 106.42	silver 47 <b>Ag</b> 107.87	cadmium 48 <b>Cd</b> 112.41	indium 49 <b>In</b> 114.82	tin 50 <b>Sn</b> 118.71	antimony 51 <b>Sb</b> 121.76	tellurium 52 <b>Te</b> 127.60	iodine 53 <b>I</b> 126.90	xenon 54 <b>Xe</b> 131.29						
caesium 55 <b>Cs</b> 132.91	barium 56 <b>Ba</b> 137.33	57-70 *	lutetium 71 <b>Lu</b> 174.97	hafnium 72 <b>Hf</b> 178.49	tantalum 73 <b>Ta</b> 180.95	tungsten 74 <b>W</b> 183.84	rhenium 75 <b>Re</b> 186.21	osmium 76 <b>Os</b> 190.23	iridium 77 <b>Ir</b> 192.22	platinum 78 <b>Pt</b> 195.08	gold 79 <b>Au</b> 196.97	mercury 80 <b>Hg</b> 200.59	thallium 81 <b>Tl</b> 204.38	lead 82 <b>Pb</b> 207.2	bismuth 83 <b>Bi</b> 208.98	polonium 84 <b>Po</b> [209]	astatine 85 <b>At</b> [210]	radon 86 <b>Rn</b> [222]					
francium 87 <b>Fr</b> [223]	radium 88 <b>Ra</b> [226]	89-102 **	lawrencium 103 <b>Lr</b> [262]	rutherfordium 104 <b>Rf</b> [261]	dubnium 105 <b>Db</b> [262]	seaborgium 106 <b>Sg</b> [266]	bohrium 107 <b>Bh</b> [264]	hassium 108 <b>Hs</b> [269]	meitnerium 109 <b>Mt</b> [268]	unnilium 110 <b>Uun</b> [271]	ununium 111 <b>Uuu</b> [272]	unubium 112 <b>Uub</b> [277]	ununquadium 114 <b>Uuq</b> [289]										
*lanthanoids		lanthanum 57 <b>La</b> 138.91	cerium 58 <b>Ce</b> 140.12	praseodymium 59 <b>Pr</b> 140.91	neodymium 60 <b>Nd</b> 144.24	promethium 61 <b>Pm</b> [145]	samarium 62 <b>Sm</b> 150.36	europium 63 <b>Eu</b> 151.96	gadolinium 64 <b>Gd</b> 157.25	terbium 65 <b>Tb</b> 158.93	dysprosium 66 <b>Dy</b> 162.50	holmium 67 <b>Ho</b> 164.93	erbium 68 <b>Er</b> 167.26	thulium 69 <b>Tm</b> 168.93	ytterbium 70 <b>Yb</b> 173.04								
**actinoids		actinium 89 <b>Ac</b> [227]	thorium 90 <b>Th</b> 232.04	protactinium 91 <b>Pa</b> 231.04	uranium 92 <b>U</b> 238.03	neptunium 93 <b>Np</b> [237]	plutonium 94 <b>Pu</b> [244]	americium 95 <b>Am</b> [243]	curium 96 <b>Cm</b> [247]	berkelium 97 <b>Bk</b> [247]	californium 98 <b>Cf</b> [251]	einsteinium 99 <b>Es</b> [252]	fermium 100 <b>Fm</b> [257]	mendelevium 101 <b>Md</b> [258]	nobelium 102 <b>No</b> [259]								

**Metals:**

**Metalloids**

**Nonmetals**

**Noble Gases**

1. Find the element that makes plumbing pipes. Is it a metal, nonmetal or metalloid?
2. Find the element that makes glowing signs, what special group is it in?
3. Find the element that makes milk good for your health. Is it a metal, nonmetal or metalloid?