

### Periodic Table Practice

**Part 1: Scavenger Hunt:** Use your periodic table to answer the following questions.

1. The element located in Period 4, Family 8 is Fe Iron.
2. The element located in Period 2, Group 15 is Nitrogen N.
3. The element located in Period 7, Family 2 is Radium Ra.
4. The element located in Period 6, Family 1 is Cesium Cs.
5. The element located in Period 1, Group 1 is Hydrogen H.
6. The element located in Period 5, Family 11 is Silver Ag.
7. The element located in Period 3, Group 18 is Argon Ar.
8. The element located in Period 2, Family 18 is Neon Ne.
9. The element located in Period 5, Group 4 is Zirconium Zr.
10. All the elements in Group 1 belong to the Alkali family.
11. All the elements in Group 2 belong to the Alkaline Earth family.
12. All of the elements in Group 17 belong to the Halogen family.
13. All the elements in Group 18 belong to the Noble Gases family.
14. The elements located between Groups 3 and 12 are called the Transition Metals.
15. Elements that have properties of both metals and nonmetals are called Metalloids.

**Part 2: Atomic Math Challenge:** Use the periodic table to fill in the blanks below.

Example:

8	← Atomic #
O	← Element Symbol
Oxygen	← Element Name
15.999	← Atomic Mass

Atomic number equals the number of protons

Atomic mass number equals the number of protons + neutrons

8
O
Oxygen
15.999

Atomic # = 8  
 Atomic Mass = 15.999  
 # of Protons = 8  
 # of Neutrons = 8  
 # of Electrons = 8

30
Zn
Zinc
65.39

Atomic # = 30  
 Atomic Mass = 65.39  
 # of Protons = 30  
 # of Neutrons = 35  
 # of Electrons = 30

3
Li
Lithium
6.941

Atomic # = 3  
 Atomic Mass = 6.941  
 # of Protons = 3  
 # of Neutrons = 4  
 # of Electrons = 3

14
Si
Silicon
28.086

Atomic # = 14  
 Atomic Mass = 28.086  
 # of Protons = 14  
 # of Neutrons = 14  
 # of Electrons = 14

5
B
Boron
10.81

Atomic # = 5  
 Atomic Mass = 10.81  
 # of Protons = 5  
 # of Neutrons = 6  
 # of Electrons = 5

35
Br
Bromine
79.904

Atomic # = 35  
 Atomic Mass = 79.904  
 # of Protons = 35  
 # of Neutrons = 45  
 # of Electrons = 35

16
S
Sulfur
32.06

Atomic # = 16  
 Atomic Mass = 32.06  
 # of Protons = 16  
 # of Neutrons = 16  
 # of Electrons = 16

53
I
Iodine
126.905

Atomic # = 53  
 Atomic Mass = 126.905  
 # of Protons = 53  
 # of Neutrons = 74  
 # of Electrons = 53

25 Mn <u>Manganese</u> 54.938
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12 Mg <u>Magnesium</u> 24.305
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18 Ar <u>Argon</u> 39.948
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79 Au <u>Gold</u> 196.967
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Atomic # = 25  
Atomic Mass = 54.938  
# of Protons = 25  
# of Neutrons = 30  
# of Electrons = 25

Atomic # = 12  
Atomic Mass = 24.305  
# of Protons = 12  
# of Neutrons = 12  
# of Electrons = 12

Atomic # = 18  
Atomic Mass = 39.948  
# of Protons = 18  
# of Neutrons = 22  
# of Electrons = 18

Atomic # = 79  
Atomic Mass = 196.967  
# of Protons = 79  
# of Neutrons = 118  
# of Electrons = 79

### Part 3: Element Names and Symbols

Directions: Give the name, # of protons, and group # for each of the element symbols below.

Symbol	Element Name	# Protons	Group #
Ni	<u>Nickel</u>	<u>28</u>	<u>10</u>
C	<u>Carbon</u>	<u>6</u>	<u>14</u>
S	<u>Sulfur</u>	<u>16</u>	<u>16</u>
Ca	<u>Calcium</u>	<u>20</u>	<u>2</u>
N	<u>Nitrogen</u>	<u>7</u>	<u>15</u>
Pb	<u>Lead</u>	<u>82</u>	<u>10</u>
P	<u>Phosphorus</u>	<u>15</u>	<u>15</u>
B	<u>Boron</u>	<u>5</u>	<u>13</u>
Cl	<u>Chlorine</u>	<u>17</u>	<u>17</u>
Au	<u>Gold</u>	<u>79</u>	<u>11</u>
Si	<u>Silicon</u>	<u>14</u>	<u>14</u>
He	<u>Helium</u>	<u>2</u>	<u>18</u>
Na	<u>Sodium</u>	<u>11</u>	<u>1</u>
K	<u>Potassium</u>	<u>19</u>	<u>1</u>
Mg	<u>Magnesium</u>	<u>12</u>	<u>2</u>

Directions: Give the symbol, atomic mass, and period number for each of the named elements below.

Element	Symbol	Atomic Mass	Period #
Lithium	<u>Li</u>	<u>7</u>	<u>2</u>
Silver	<u>Ag</u>	<u>108</u>	<u>5</u>
Iron	<u>Fe</u>	<u>56</u>	<u>4</u>
Boron	<u>B</u>	<u>11</u>	<u>2</u>
Neon	<u>Ne</u>	<u>20</u>	<u>2</u>
Sodium	<u>Na</u>	<u>23</u>	<u>3</u>
Carbon	<u>C</u>	<u>12</u>	<u>2</u>
Oxygen	<u>O</u>	<u>16</u>	<u>2</u>
Hydrogen	<u>H</u>	<u>1</u>	<u>1</u>
Chlorine	<u>Cl</u>	<u>35</u>	<u>3</u>
Cesium	<u>Cs</u>	<u>133</u>	<u>6</u>
Magnesium	<u>Mg</u>	<u>24</u>	<u>3</u>



Chemistry Scavenger Hunt

Symbol	Name	Atomic Number	Atomic Mass	Protons	Neutrons	Classification	Electron Configuration
Br	Bromine	35	70	35	45	halogen	2,8,18,7
Li	lithium	3	6.941	3	4	Metal	2,1
Ge	germanium	32	72.64	32	34	metalloid	2,8,18,4
C	carbon	6	12.0107	6	6	non-metal	2,4
Xe	xenon	54	131.293	54	77	non-metal gas	2,8,18,18,8