Sodium

22.989770



2-8-1

Element Name

Bohr Electron Configuration

Atomic Number

These \*\* indicate that there are energy levels of 2-8-18 for elements 55 & above

Letter Symbol

 Atomic Mass

 Cerium

140.116



 Praseodymium

140.90765

 

Neodymium

144.24



 Thorium

232.038



Promethium

(145)

**

Protactinium

231.03588



 Uranium

238.0289



Neptunium

(237)



 Samarium

150.36



 Plutonium

(244)



 Europium

151.964



Americium

(243)



Gadolinium

157.25



 Curium

(247)

 

 Terbium

158.92534



 Dysprosium

162.500



 Holmium

164.93032



Berkelium

(247)



 Erbium

167.259



Californium

(251)



Einsteinium

(252)



 Fermium

(257)

 Thulium

168.93421

 

 Mendelevium

(258)

 

Ytterbium

173.054



 Nobelium

(259)



 Lutetium

174.9668



Lawrencium

(262)



Key:

*italicized symbols* = synthetic (human made)

an entry in ( ) indicates the longest lived isotope of an element for which the atomic mass is indeterminate

Beryllium

9.012182



2-2

 Boron

10.811

 

2-3

 Carbon

12.0107

 

2-4

 Nitrogen

14.00674

 

2-5

 Oxygen

15.9994

 

2-6

 Fluorine

18.9984

 

2-7

 Neon

20.1797

 

 **2-8**

Lithium

6.941

 

2-1

Sodium

22.989770

 2-8-1

Magnesium

24.3050

2-8-2

 Aluminum

26.98153



2-8-3

 Silicon

28.0855



2-8-4

Phosphorus

30.973761



**2-8-5**

 Sulfur

32.066



**2-8-6**

 Chlorine

35.4527



2-8-7

 Argon

39.948

 **2-8-8**

Potassium

39.0983



2-8-8-1

Calcium

40.078



2-8-8-2

 Scandium

44.955910



2-8-9-2

 Titanium

47.867

 2-8-10-2

 Vanadium

50.9415



2-8-11-2

 Chromium

51.9961



2-8-13-1

 Manganese

54.938049

 

 2-8-13-2

 Iron

55.845



2-8-14-2



 Cobalt

58.933200



2-8-15-2

 Nickel

58.6934



2-8-16-2

Copper

63.546



2-8-18-1

 Zinc

65.39



2-8-18-2

Gallium

69.723



2-8-18-3

Germanium

72.61



2-8-18-4

 Arsenic

74.92160



2-8-18-5

 Selenium

 78.96



2-8-18-6

Bromine

79.904



2-8-18-7

 Krypton

83.80



**2-8-18-8**

Rubidium

85.4678

  2-8-18-8-1

Strontium

87.62



2-8-18-8-2

Yttrium

88.90585

  2-8-18-9-2

Zirconium

91.224

 2-8-18-10-2

Niobium

92.90638

 

2-8-18-12-1

 Molybdenum

 95.94

 

2-8-18-13-1

 Technetium

(98)



2-8-18-14-1

 Ruthenium

101.07

 

2-8-18-15-1

Rhodium

102.90550

 

 2-8-18-16-1

Palladium

106.42

 

2-8-18-18

Silver

107.8682

 

2-8-18-18-1

Cadmium

112.411

 

2-8-18-18-2

Indium

114.818



2-8-18-18-3

 Tin

118.710

 

2-8-18-18-4

 Antimony

121.760



 2-8-18-18-5

Tellurium

127.60

 

2-8-18-18-6

 Iodine

126.90447



2-8-18-18-7

 Xenon

131.29

 

**2-8-18-18-8**

 Cesium

132.90545

 

 \*\*-18-8-1

 Barium

137.327



-18-8-2

Lanthanum

138.9055



 -18-9-2

Hafnium

178.49



-32-10-2

Tantalum

180.9479

 

-32-11-2

Tungsten

183.84

 

-32-12-2

Rhenium

186.207

 

-32-13-2

Osmium

190.23

 

-32-14-2

Iridium

192.217



-32-15-2

Platinum

195.078



-32-17-1

Gold

196.96655

 

 -32-18-1

Mercury

200.59

 

-32-18-2

 Thallium

204.3833

 

-32-18-3

 Lead

207.2

 

 -32-18-4

 Bismuth

208.98038



-32-18-5

 Polonium

(209)



-32-18-6

 Astatine

(210)



-32-18-7

 Radon

(222)



**-32-18-8**

Radium

(226)

  -32-18-8-2

 Actinium

(227)

  -32-18-9-2

 Rutherfordium

(267)

 

 Dubnium

(268)

Seaborgium

(271)



 Bhorium

(272)



 Hassium

(270)



 Meitnerium

(276)



 Darmstadtium

(281)

 

 Roentgenium

 (280)

 

Copernicium

(285)

 

 

Flerovium

(289)

 



Livermorium

(293)





 Hydrogen

1.00794



1

 Helium

4.002602



**2**

 3 4 5 6 7 8 9 10 11 12

 1

 2

 13 14 15 16 17

 18

Beryllium

9.012182



2-2

 Boron

10.811

 

2-3

 Carbon

12.0107

 

2-4

 Nitrogen

14.00674

 

2-5

 Oxygen

15.9994

 

2-6

 Fluorine

18.9984

 

2-7

 Neon

20.1797

 

 **2-8**

Lithium

6.941

 

2-1

Sodium

22.989770

 2-8-1

Magnesium

24.3050

2-8-2

 Aluminum

26.98153



2-8-3

 Silicon

28.0855



2-8-4

Phosphorus

30.973761



**2-8-5**

 Sulfur

32.066



**2-8-6**

 Chlorine

35.4527



2-8-7

 Argon

39.948

 **2-8-8**

Potassium

39.0983



2-8-8-1

Calcium

40.078



2-8-8-2

 Scandium

44.955910



2-8-9-2

 Titanium

47.867

 2-8-10-2

 Vanadium

50.9415



2-8-11-2

 Chromium

51.9961



2-8-13-1

 Manganese

54.938049

 

 2-8-13-2

 Iron

55.845



2-8-14-2



 Cobalt

58.933200



2-8-15-2

 Nickel

58.6934



2-8-16-2

Copper

63.546



2-8-18-1

 Zinc

65.39



2-8-18-2

Gallium

69.723



2-8-18-3

Germanium

72.61



2-8-18-4

 Arsenic

74.92160



2-8-18-5

 Selenium

 78.96



2-8-18-6

Bromine

79.904



2-8-18-7

 Krypton

83.80



**2-8-18-8**

Rubidium

85.4678

  2-8-18-8-1

Strontium

87.62



2-8-18-8-2

Yttrium

88.90585

  2-8-18-9-2

Zirconium

91.224

 2-8-18-10-2

Niobium

92.90638

 

2-8-18-12-1

 Molybdenum

 95.94

 

2-8-18-13-1

 Technetium

(98)



2-8-18-14-1

 Ruthenium

101.07

 

2-8-18-15-1

Rhodium

102.90550

 

 2-8-18-16-1

Palladium

106.42

 

2-8-18-18

Silver

107.8682

 

2-8-18-18-1

Cadmium

112.411

 

2-8-18-18-2

Indium

114.818



2-8-18-18-3

 Tin

118.710

 

2-8-18-18-4

 Antimony

121.760



 2-8-18-18-5

Tellurium

127.60

 

2-8-18-18-6

 Iodine

126.90447



2-8-18-18-7

 Xenon

131.29

 

**2-8-18-18-8**

 Cesium

132.90545

 

 \*\*-18-8-1

 Barium

137.327



-18-8-2

Lanthanum

138.9055



 -18-9-2

Hafnium

178.49



-32-10-2

Tantalum

180.9479

 

-32-11-2

Tungsten

183.84

 

-32-12-2

Rhenium

186.207

 

-32-13-2

Osmium

190.23

 

-32-14-2

Iridium

192.217



-32-15-2

Platinum

195.078



-32-17-1

Gold

196.96655

 

 -32-18-1

Mercury

200.59

 

-32-18-2

 Thallium

204.3833

 

-32-18-3

 Lead

207.2

 

 -32-18-4

 Bismuth

208.98038



-32-18-5

 Polonium

(209)



-32-18-6

 Astatine

(210)



-32-18-7

 Radon

(222)



**-32-18-8**

Francium

(223)

 

-32-18-8-1

Radium

(226)

  -32-18-8-2

 Actinium

(227)

  -32-18-9-2

 Rutherfordium

(267)

 

 Dubnium

(268)

Seaborgium

(271)



 Bhorium

(272)



 Hassium

(270)



 Meitnerium

(276)



 Darmstadtium

(281)

 

 Roentgenium

 (280)

 

Copernicium

(285)

 

 

 







 Hydrogen

1.00794



1

 Helium

4.002602



**2**