

Practice Exercises:

Name: _____

Bohr – Rutherford Atomic Models (Elements 1-18)

Fill in the information for the following Elements and then draw the atomic diagram for each.

a) OXYGEN ATOM

Atomic Symbol: O

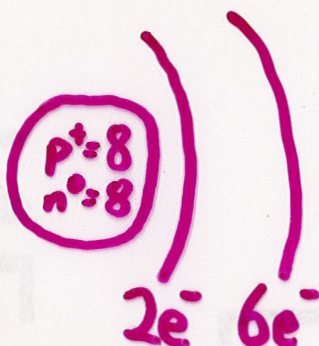
Atomic Number: 8

Atomic Mass: 16

of p^+ : 8

of e^- : 8

of n^0 : $16 - 8 = 8$



b) LITHIUM ATOM

Atomic Symbol: Li

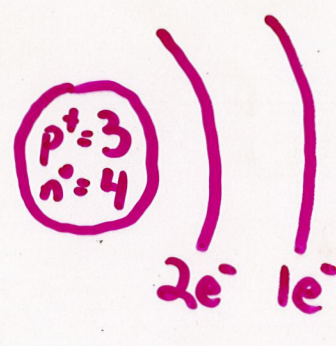
Atomic Number: 3

Atomic Mass: 7

of p^+ : 3

of e^- : 3

of n^0 : $7 - 3 = 4$



c) Sodium ATOM

Atomic Symbol: Na

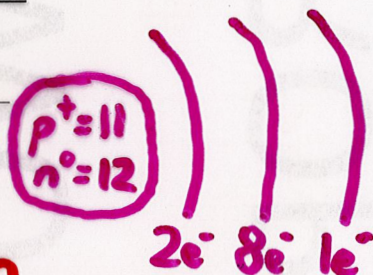
Atomic Number: 11

Atomic Mass: 23

of p^+ : 11

of e^- : 11

of n^0 : $23 - 11 = 12$



d) SILICON ATOM

Atomic Symbol: Si

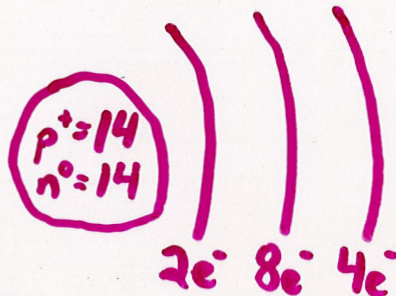
Atomic Number: 14

Atomic Mass: 28

of p^+ : 14

of e^- : 14

of n^0 : $28 - 14 = 14$



e) HYDROGEN ATOM

Atomic Symbol: H

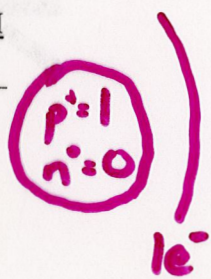
Atomic Number: 1

Atomic Mass: 1

of p^+ : 1

of e^- : 1

of n^0 : $1 - 1 = 0$



f) Aluminum ATOM

Atomic Symbol: Al

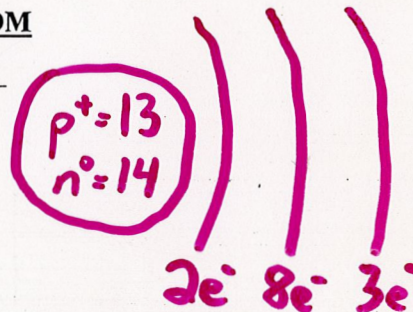
Atomic Number: 13

Atomic Mass: 27

of p^+ : 13

of e^- : 13

of n^0 : 14



g) Use the information contained in the following diagram to fill in the missing information

Argon ATOM

Atomic Symbol: Ar

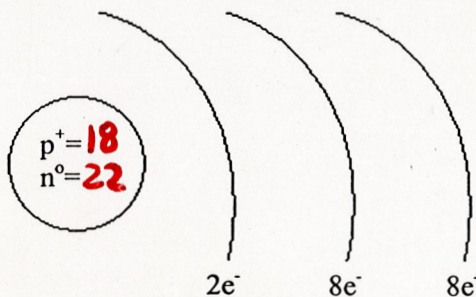
Atomic Number: 18

Atomic Mass: 40

of p^+ : 18

of e^- : 18

of n^0 : $40 - 18 = 22$



Practice Exercises:

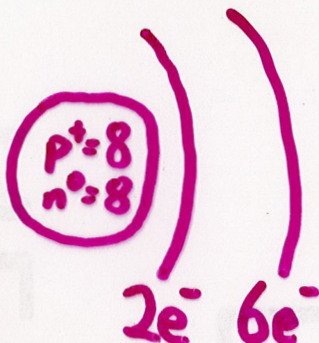
Name: _____

Bohr – Rutherford Atomic Models (Elements 1-18)

Fill in the information for the following Elements and then draw the atomic diagram for each.

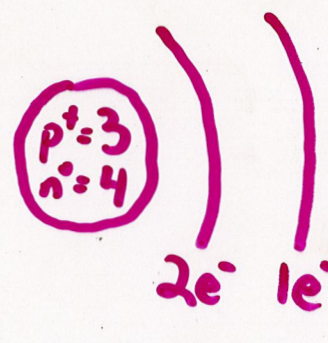
a) OXYGEN ATOM

Atomic Symbol: O
 Atomic Number: 8
 Atomic Mass: 16
 # of p⁺: 8
 # of e⁻: 8
 # of n⁰: 16-8=8



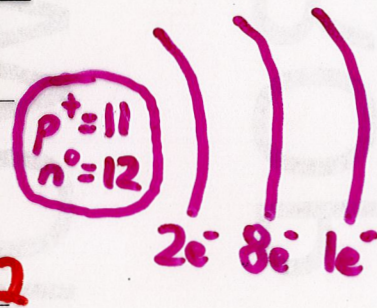
b) LITHIUM ATOM

Atomic Symbol: Li
 Atomic Number: 3
 Atomic Mass: 7
 # of p⁺: 3
 # of e⁻: 3
 # of n⁰: 7-3=4



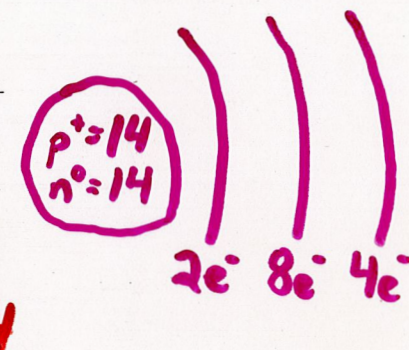
c) Sodium ATOM

Atomic Symbol: Na
 Atomic Number: 11
 Atomic Mass: 23
 # of p⁺: 11
 # of e⁻: 11
 # of n⁰: 23-11=12



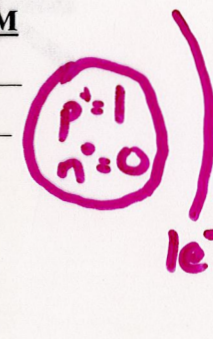
d) SILICON ATOM

Atomic Symbol: Si
 Atomic Number: 14
 Atomic Mass: 28
 # of p⁺: 14
 # of e⁻: 14
 # of n⁰: 28-14=14



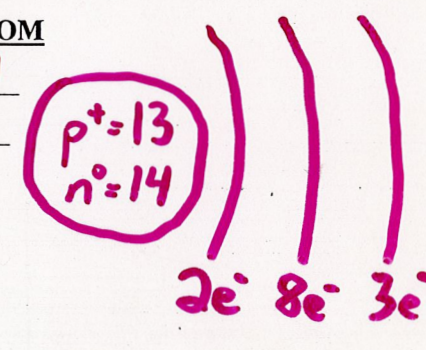
e) HYDROGEN ATOM

Atomic Symbol: H
 Atomic Number: 1
 Atomic Mass: 1
 # of p⁺: 1
 # of e⁻: 1
 # of n⁰: 1-1=0



f) Aluminum ATOM

Atomic Symbol: Al
 Atomic Number: 13
 Atomic Mass: 27
 # of p⁺: 13
 # of e⁻: 13
 # of n⁰: 14



g) Use the information contained in the following diagram to fill in the missing information

Argon ATOM
 Atomic Symbol: Ar
 Atomic Number: 18
 Atomic Mass: 40
 # of p⁺: 18
 # of e⁻: 18
 # of n⁰: 40-18=22

