

Name: \_\_\_\_\_ Date: \_\_\_\_\_ B#: \_\_\_\_\_

# Atomic Structure:

8	→	
O	→	
Oxygen	→	
15.999	→	

What 2 parts of an atom does the atomic # represent?

\_\_\_\_\_ & \_\_\_\_\_

How do you figure out the # of neutrons?

\_\_\_\_\_

6
C
Carbon
12.011

# P: \_\_\_\_\_

# E: \_\_\_\_\_

# N: \_\_\_\_\_

10
Ne
Neon
20.179

# P: \_\_\_\_\_

# E: \_\_\_\_\_

# N: \_\_\_\_\_

19
K
Potassium
39.098

# P: \_\_\_\_\_

# E: \_\_\_\_\_

# N: \_\_\_\_\_

## CREATING BOHR DIAGRAMS

### Rules for arranging electrons:

1. The 1<sup>st</sup> energy level can hold up to 2 electrons.
2. The 2<sup>nd</sup> energy level can hold up to 8 electrons.
3. The 3<sup>rd</sup> energy level can hold up to 8 electrons.

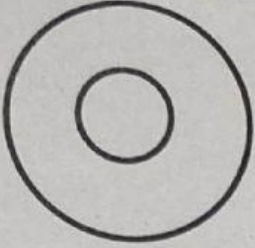
What term is used to describe the electrons in the outermost energy level?


\_\_\_\_\_

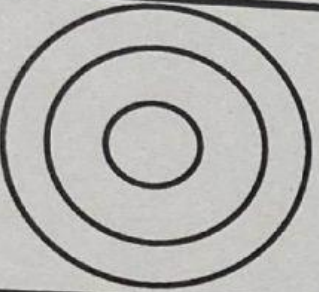
Sketch An Atom	
Draw 5 protons in the nucleus and label with the charge.	
Draw 6 neutrons in the nucleus and label with the charge.	
Draw 2 electrons in the 1 <sup>st</sup> energy level and label with their charge.	
Draw 3 electrons in the 2 <sup>nd</sup> energy level and label with their charge.	
What element is represented?	

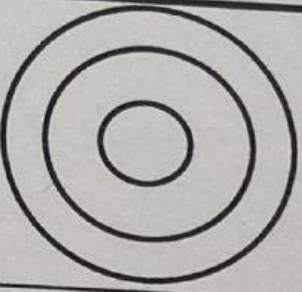
Sketch An Atom	
Draw 3 protons in the nucleus and label with the charge.	
Draw 4 neutrons in the nucleus and label with the charge.	
Draw 2 electrons in the 1 <sup>st</sup> energy level and label with their charge.	
Draw 1 electrons in the 2 <sup>nd</sup> energy level and label with their charge.	
What element is represented?	



Neon		
# P		
# E		
# N		
# of Valence Electrons		
Atomic #: 10		Mass #: 20

Magnesium		
# P		
# E		
# N		
# of Valence Electrons		
Atomic #: 12		Mass #: 24

Chlorine		
# P		
# E		
# N		
# of Valence Electrons		
Atomic #: 17		Mass #: 35

Silicon		
# P		
# E		
# N		
# of Valence Electrons		
Atomic #: 14		Mass #: 28

## CREATING LEWIS DOT DIAGRAMS

### Rules for arranging electrons:

1. Figure out how many valence electrons the element has in its atom.
2. Place dots around the element's symbol one at a time (can't exceed 8).

Ne

Mg

Cl

Si