

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

# Atomic Structure:

8  
O  
Oxygen  
15.999

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

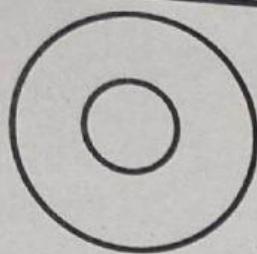
# E

# N

# of Valence Electrons

Atomic #: 10

Mass #: 20



### Magnesium

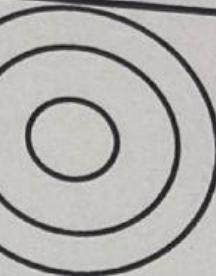
# P

# E

# N

# of Valence Electrons

Mass #: 24



### Chlorine

# P

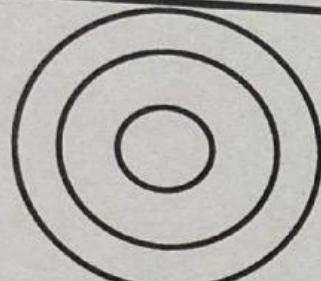
# E

# N

# of Valence Electrons

Atomic #: 17

Mass #: 35



### Silicon

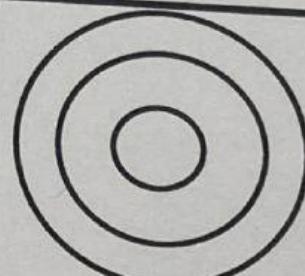
# P

# E

# N

# of Valence Electrons

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