

**BOHR DIAGRAM WORKSHEET**

NAME: \_\_\_\_\_

Draw and complete the following Bohr Diagrams for the first twenty elements. Some have been set-up for you. Label the families and number of valence electrons in each group.

*Alkali Metals*

*Noble Gases*

electron	orbital shells	number of protons	number of neutrons	mass number	Element symbol	He-4

*Alkaline Earth Metals*

*V=*

*V=*

*V=*

*V=*

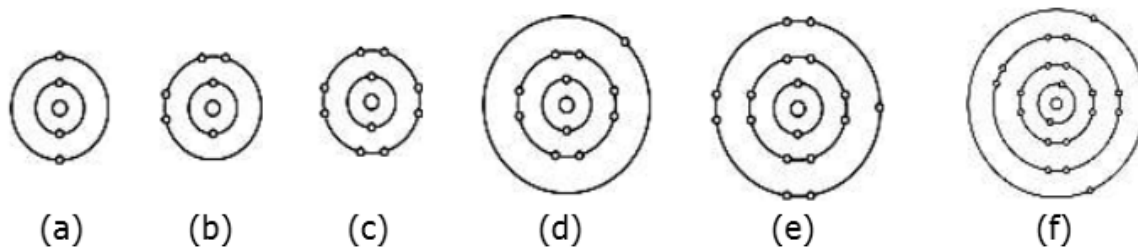
*V=*

*V=*

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*V=*

Identify the elements whose Bohr model diagrams are shown below. Write the names of the elements on the space provided. Then write the number of valence electrons.












- a) Beryllium – 2
- b) Carbon – 4
- c) Neon – 8
- d) Sodium – 1
- e) Chlorine – 7
- f) Calcium – 2

# Lewis Structures of Atoms

## 1. Identify the Number of Valence Electrons and Draw the Lewis Dot Structure

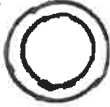
Element	Group Number (use Periodic Table)	# of Valence Electrons	Lewis Dot Structure
Calcium	2	2	Ca $\cdot\cdot$
Carbon	14	4	$\cdot\cdot$ C $\cdot\cdot$
Hydrogen	1	1	H $\cdot$
Helium	18	2	$\cdot\cdot$ He $\cdot\cdot$
Oxygen	16	6	$\cdot\cdot$ O $\cdot\cdot$
Fluorine	17	7	$\cdot\cdot$ F $\cdot\cdot$
Neon	18	8	$\cdot\cdot$ Ne $\cdot\cdot$
Sodium	1	1	Na $\cdot$
Aluminum	13	3	$\cdot$ Al $\cdot\cdot$

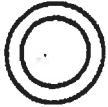
Element	Symbol	Number	Mass	Protons	Electrons	Neutrons	Lewis Dot
Oxygen	O	8	16	8	8	8	
Magnesium	Mg	12	24	12	12	12	
Potassium	K	19	39	19	19	20	
Beryllium	Be	4	9	4	4	5	
Fluorine	F	9	19	9	9	10	
Neon	Ne	10	20	10	10	10	
Carbon	C	6	12	6	6	6	
Silicon	Si	14	28	14	14	14	
Nitrogen	N	7	14	7	7	7	

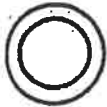
Science 10


**Bohr Models & Lewis Structures**


1. Complete the following Bohr & Lewis diagrams.

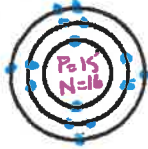
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="text-align: center; padding: 5px;"><u>  </u> B</td></tr> <tr><td style="text-align: center; padding: 5px;">_____</td></tr> <tr><td style="text-align: center; padding: 5px;">_____</td></tr> </table>	<u>  </u> B	_____	_____	P = ____ N = ____ E = ____
<u>  </u> B				
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Bohr Diagram				
				
Lewis Structure	B			

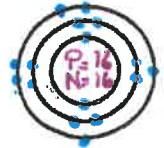
<table border="1" style="margin: auto; border-collapse: collapse;"> <tr><td style="text-align: center; padding: 5px;"><u>  </u> Li</td></tr> <tr><td style="text-align: center; padding: 5px;">_____</td></tr> <tr><td style="text-align: center; padding: 5px;">_____</td></tr> </table>	<u>  </u> Li	_____	_____	P = ____ N = ____ E = ____
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Lewis Structure	Li			

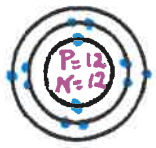
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