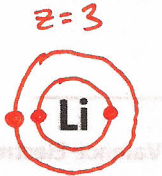


# ANSWER KEY

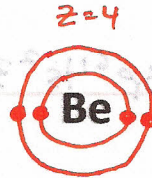
## EXTRA PRACTICE: Bohr Models/Electron-Dots/Valence Electrons Name: \_\_\_\_\_

Draw the Bohr Model for each of the following elements using the SMALLER font element symbol on left. Then draw the Electron-Dot Structure for each element using the LARGER font element symbol on right.

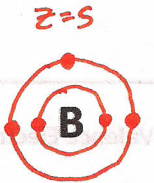
1.



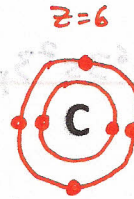
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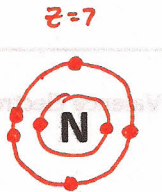
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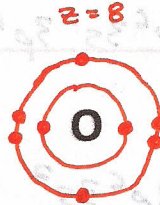
4.



5.



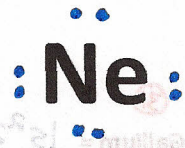
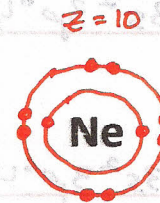
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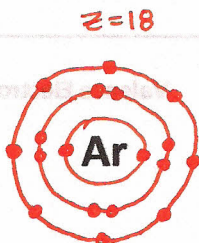
7.



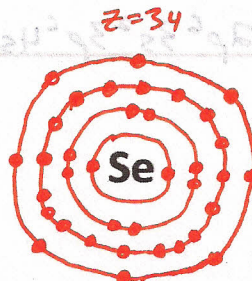
8.



9.



10.



Write the electron configuration notation (long hand method) for each of the following elements. Circle the identity of the valence electrons and determine the number of valence electrons.

1. Francium =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^6 6s^2 4f^{14} 5d^{10} 6p^6 7s^1$   
Valence Electrons = 1

2. Tin =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^2$   
Valence Electrons = 4

3. Strontium =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2$   
Valence Electrons = 2

4. Phosphorus =  $1s^2 2s^2 2p^6 3s^2 3p^3$   
Valence Electrons = 5

5. Arsenic =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^3$   
Valence Electrons = 5

6. Potassium =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1$   
Valence Electrons = 1

7. Magnesium =  $1s^2 2s^2 2p^6 3s^2$   
Valence Electrons = 2

8. Iodine =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^{10} 5p^5$   
Valence Electrons = 7

9. Gallium =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^1$   
Valence Electrons = 3

10. Bromine =  $1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^5$   
Valence Electrons = 7