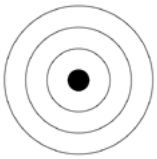
Name: _____ Period: _____ Date: _____

Bohr Models

Skills Practice B

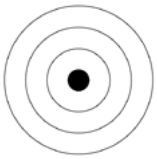
INSTRUCTIONS: *Determine the total and valence electrons and draw the Bohr model for each of the following elements. Remember to fill the lowest energy levels first and never exceed the maximum allowed electrons per level. Keep in mind the fourth through the seventh energy levels will hold two electrons (in the s-orbitals) before the lower energy levels will hold more than eight.*

1. Chlorine (Cl)



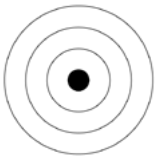
Total e^-: Valence e^-:

2. Aluminum (Al)



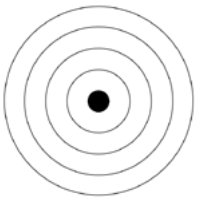
Total e^-: Valence e^-:

3. Phosphorus (P)



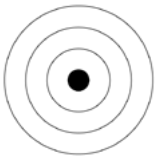
Total e^-: Valence e^-:

4. Germanium (Ge)



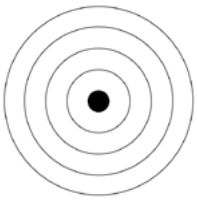
Total e^-: Valence e^-:

5. Sulfur (S)



Total e^-: Valence e^-:

6. Potassium (K)

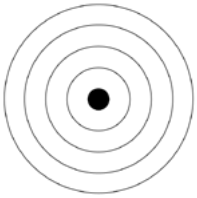


Total e^-: Valence e^-:

7. Argon (Ar)

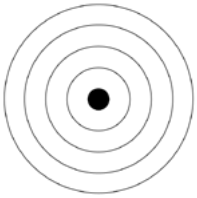
Total e^-: Valence e^-:

8. Selenium (Se)



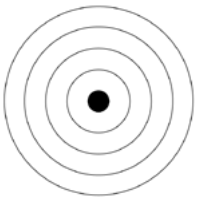
Total e^-: Valence e^-:

9. Gallium (Ga)



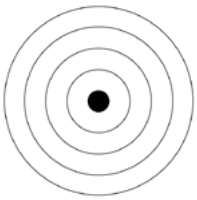
Total e^-: Valence e^-:

10. Calcium (Ca)



Total e^-: Valence e^-:

11. Arsenic (As)



Total e^-: Valence e^-:

12. Silicon (Si)

Total e^-: Valence e^-:

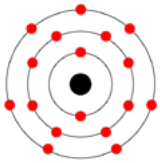
Name: _____ Period: _____ Date: _____

Bohr Models

Skills Practice B

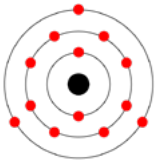
INSTRUCTIONS: *Determine the total and valence electrons and draw the Bohr model for each of the following elements. Remember to fill the lowest energy levels first and never exceed the maximum allowed electrons per level. Keep in mind the fourth through the seventh energy levels will hold two electrons (in the s-orbitals) before the lower energy levels will hold more than eight.*

1. Chlorine (Cl)



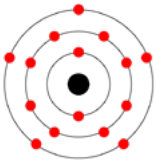
Total e⁻: **17** Valence e⁻: **7**

2. Aluminum (Al)



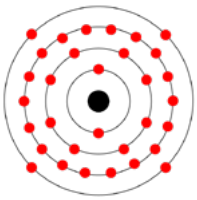
Total e⁻: **13** Valence e⁻: **3**

3. Phosphorus (P)



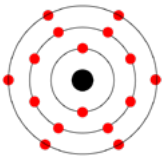
Total e⁻: **15** Valence e⁻: **5**

4. Germanium (Ge)



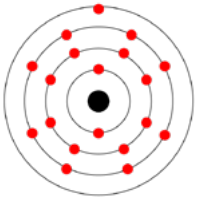
Total e⁻: **31** Valence e⁻: **3**

5. Sulfur (S)



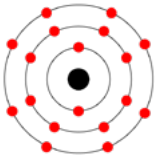
Total e⁻: **16** Valence e⁻: **6**

6. Potassium (K)



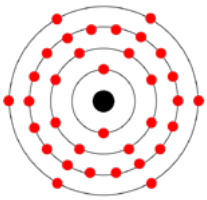
Total e⁻: **19** Valence e⁻: **1**

7. Argon (Ar)



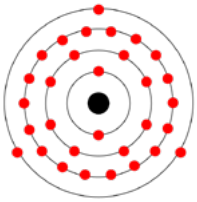
Total e⁻: **18** Valence e⁻: **8**

8. Selenium (Se)



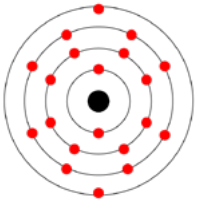
Total e⁻: **34** Valence e⁻: **6**

9. Gallium (Ga)



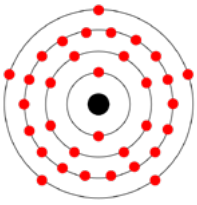
Total e⁻: **31** Valence e⁻: **3**

10. Calcium (Ca)



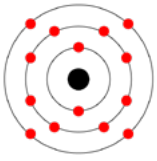
Total e⁻: **20** Valence e⁻: **2**

11. Arsenic (As)



Total e⁻: **33** Valence e⁻: **5**

12. Silicon (Si)



Total e⁻: **14** Valence e⁻: **4**