**Ionic Bonding Modeling**

For each pair of elements below draw an atomic diagram showing electrons in different energy levels. Draw arrows to show where the outer electrons will go during a chemical reaction, then draw the resulting compound. Finally, fill in the table below each reaction. Refer to the sample shown.



**Li + F 🡪 LiF**

 **Atoms Valence Electrons Electron transfer from/to each atom Ions formed in the product**

 Li

 F

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reactions | Atoms | Valence Electrons | Electron transfer from/to each atom | Ions formed in the product |
| 1) Li + Cl 🡪 LiCl |  |  |  |  |
| 2) Be + O 🡪 BeO |  |  |  |  |
| 3) Be + F 🡪 BeF2 |  |  |  |  |
| 4) Mg + S 🡪 MgS |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reactions | Atoms | Valence Electrons | Electron transfer from/to each atom | Ions formed in the product |
| 5) Al + F 🡪 AlF3 |  |  |  |  |
| 6) Na + O 🡪 Na2O |  |  |  |  |
| 7) Li + N 🡪 |  |  |  |  |
| 8) Mg + F 🡪 |  |  |  |  |
| 9) Na + F 🡪 |  |  |  |  |
| 10) Al + O 🡪 |  |  |  |  |
| 11) Li O 🡪 |  |  |  |  |
| 12) Mg + O |  |  |  |  |