Lewis Dot Diagram Worksheet Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Use the periodic table to find the number of valence electrons for each element, draw the dot diagram for the

element, draw the dot diagram for the ion, and name the ion.

Remember

* Dot diagrams for atoms : number of dots = number of valence electrons
* Positive ions (cations) : lose all dots and gain that many + signs
* Negative ions (anions): gain enough dots to make eight and gain that many – signs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Element | Bohr Diagram (atom | Valence electrons | Lewis Dot diagram (atom) | Lewis Dot diagram (ion)  |
| Selenium |  |  |  |  |
| Calcium |  |  |  |  |
| Fluorine |  |  |  |  |
| Nitrogen |  |  |  |  |
| Magnesium |  |  |  |  |
| Sulfur |  |  |  |  |
| Sodium |  |  |  |  |
| Chlorine |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Compound | Formula | Bohr Diagram | Lewis Dot diagram  |
| Sodium + Chlorine | NaCl |  |  |
| Potassium + Oxygen | K2O |  |  |
| Aluminum and fluorine  | AlF3 |  |  |
| Sodium and sulfur | Na2S |  |  |
| Magnesium and Bromine | MgBr2 |  |  |
| Potassium and sulfur | K2S |  |  |
| Sodium and oxygen | Na2O |  |  |
| Magnesium and fluorine | MgF2 |  |  |
| Calcium and Bromine | CaF2 |  |  |
| Calcium |  |  |  |
| Fluorine |  |  |  |
| Lithium |  |  |  |
| Oxygen |  |  |  |
| Magnesium |  |  |  |
| Sulfur |  |  |  |
| Sodium |  |  |  |
| Chlorine |  |  |  |
| Potassium |  |  |  |
| Bromine |  |  |  |