

Chemical Bonds – Lewis Dot Intro

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

Notes: Scientists use *Lewis Dot Structures* to show the valence electrons of an element as dots. Since bonding involves the valence shell electrons only, it is only necessary to illustrate those outer electrons.

Element	Bohr Diagram	Group Number (PT)	# of Valence Electrons	Lewis Dot Structure
Calcium				
Carbon				
Hydrogen				
Helium				
Oxygen				
Fluorine				
Neon				
Sodium				
Aluminum				

Lewis Dot, Formula Unit & Naming Practice Sheet

Notes:

1. An **ionic bond** is an attraction of a *cation* for an *anion* resulting from the transfer of electrons. Remember, the smaller nonmetals are more electronegative and pull the electrons close, away from the larger, less electronegative metals.
2. When naming ionic compounds, the Metal is named first, followed by the nonmetal with an *-ide* ending. *Ex. Sodium Fluorine becomes Sodium Fluoride.*
3. **Formula Unit:** Lowest whole number ratio of elements in the compound. *Ex. Ca₃N₂*

<p>1. Draw the Lewis Structure for Mg & Cl</p> <p>Formula Unit: _____</p> <p>Name of Compound: _____</p>	<p>2. Draw the Lewis Structure for Mg & S</p> <p>Formula Unit: _____</p> <p>Name of Compound: _____</p>
<p>3. Draw the Lewis Structure for K & F</p> <p>Formula Unit: _____</p> <p>Name of Compound: _____</p>	<p>4. Draw the Lewis Structure for K & O</p> <p>Formula Unit: _____</p> <p>Name of Compound: _____</p>
<p>5. Draw the Lewis Structure for Be & N</p> <p>Formula Unit: _____</p> <p>Name of Compound: _____</p>	<p>6. Draw the Lewis Structure for Ca & P</p> <p>Formula Unit: _____</p> <p>Name of Compound: _____</p>

<p>7. Draw the Lewis Structure for Al & F</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>	<p>8. Draw the Lewis Structure for Ca & I</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>
<p>9. Draw the Lewis Structure for Rb & O</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>	<p>10. Draw the Lewis Structure for Sr & F</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>
<p>11. Draw the Lewis Structure for Al & Cl</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>	<p>12. Draw the Lewis Structure for Mg & P</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>
<p>13. Draw the Lewis Structure for B & O</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>	<p>14. Draw the Lewis Structure for Be & S</p> <p>Formula Unit: _____</p> <p>Name of Compound:</p>