

Worksheet - Ionic compounds (Dot diagrams)

Name _____

Period _____

Date _____

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 Name	Dot diagram (atom)	Dot diagram (Ion)	Ion name
Selenium			
Calcium			
Fluorine			
Lithium			
Oxygen			
Magnesium			
Sulfur			
Sodium			
Chlorine			
Potassium			
Bromine			
Barium			
Iodine			
Aluminum			

Write the name or formula and draw the Lewis dot diagram for each compound below.

Name of compound	Formula unit	Lewis dot diagram
Sodium Chloride		
Potassium oxide		
Aluminum fluoride		
	Na_2S	
	MgBr_2	
Potassium sulfide		
Aluminum chloride		
	Na_2O	
	MgF_2	
Tin (IV) fluoride		
Calcium bromide		