

Name _____ block _____

Activity: Ionic Compounds

Part 1. Draw the electron transfer diagram for 2 complete structures. Write the formula & name the compound.

Cation:	Anion:	Electron Transfer Diagram

1) Chemical Formula: _____ Name: _____

Cation:	Anion:	Electron Transfer Diagram

2) Chemical Formula: _____ Name: _____

Part 2. Using the cards, create 4 compounds with the following cation:anion ratio. Draw the particle diagram. Write the formula & name the compound. You cannot use a chip

	Ratio	Cation	Anion	Formula	Compound Name
6)	1:1				
7)	1:2				
8)	3:1				
9)	2:1				
10)	1:3				

Part 3. Examine the common household item. What is the item used for? Write the formula & name the compound.

	Household Item & Use	Compound Name	Cation	Anion	Formula
3)					
4)					
5)					

Teacher Guide: made 3 sets of each where 3 groups of students rotated within their own mini part1-3.

Part 1: Making Ionic Compounds expressing via Electron Transfer Diagram

MegaBlocs manipulative

Activity: Ionic Compounds
 Draw a diagram for 2 complete structures. Write the formula & name the compound.

Example 1:
 Cation: Na^{+1} Anion: N^{-3}
 Electron Transfer Diagram: $[\text{Na}]^{+1} + [\text{N}]^{3-} \rightarrow [\text{Na}]^{+1} [\text{N}]^{3-}$
 1) Chemical Formula: Na_3N Name: Sodium Nitride

Example 2:
 Cation: Ba^{+2} Anion: Br^{-1}
 Electron Transfer Diagram: $[\text{Ba}]^{+2} + 2[\text{Br}]^{-1} \rightarrow [\text{Ba}]^{+2} [\text{Br}]^{-1} [\text{Br}]^{-1}$
 2) Chemical Formula: BaBr_2 Name: Barium Bromide

Part 2. Using the cards, create 4 compounds with the following cation:anion ratio. Draw the particle diagram. Write the formula & name the compound.

Ratio	Cation	Anion	Formula	Compound Name

Part 2: Making Ionic Compounds expressing via chemical formula & name

Cation/Anion Chip matching

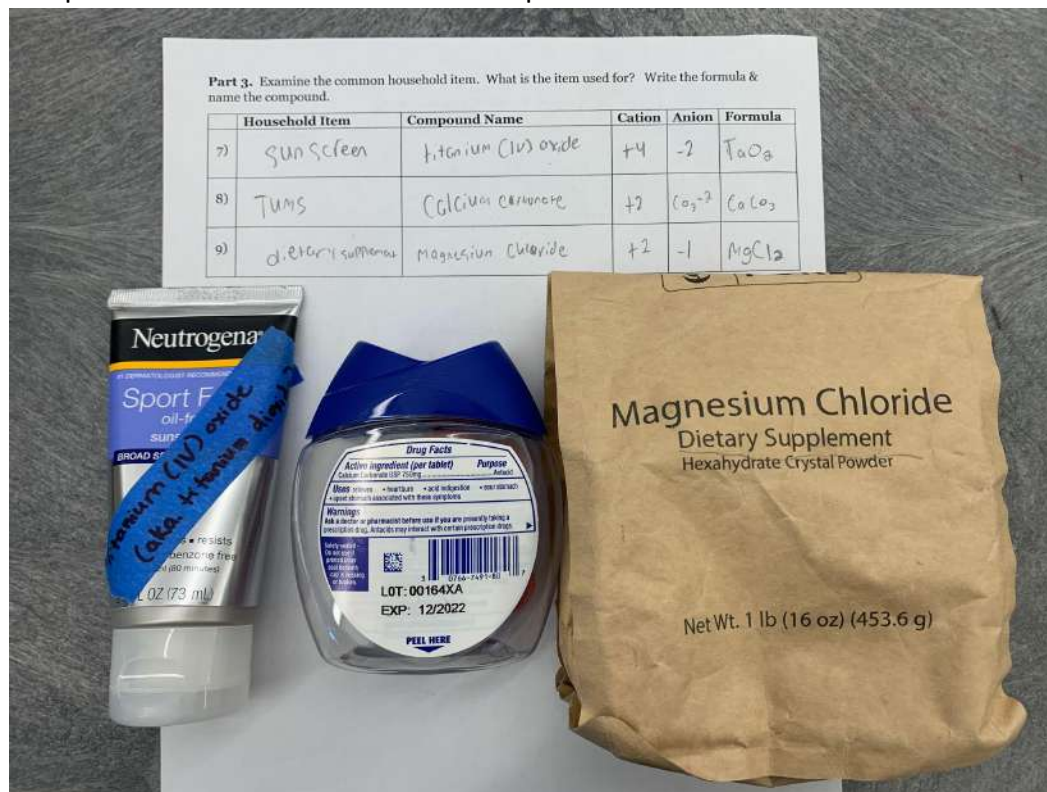
Example 2:
 2) Chemical Formula: BaBr_2 Name: Barium Bromide

Part 2. Using the cards, create 4 compounds with the following cation:anion ratio. Draw the particle diagram. Write the formula & name the compound.

	Ratio	Cation	Anion	Formula	Compound Name
3)	1:1	Li^{+1}	Br^{-1}	LiBr	Lithium bromide
4)	1:2	Mg^{+2}	Cl^{-1}	MgCl_2	Magnesium Chloride
5)	3:1	Li^{+1}	P^{-3}	Li_3P	Lithium Phosphide
6)	2:1	Na^{+1}	S^{-2}	Na_2S	Sodium Sulfide

Part 3: Ionic Compounds in Household Items via chemical formula

Sample household items with ionic compound name



All Household Samples – can add Epsom salt (MgSO₄). Welcomed to suggestions... I kept it to simple polyatomic ion compounds

