

Section 12 Practice

1) Write the formula for the compounds made of the following ions:

a) calcium and iodine	b) sodium and oxygen	c) oxygen and magnesium
d) iron and oxygen	e) tin and bromine	f) potassium and sulfur
g) copper and chloride	h) barium and iodine	i) aluminum and oxygen
j) aluminum and chlorine		

2) Write the formula for the following compounds:

a) silver oxide	b) iron (III) sulfate	c) calcium nitrate
d) magnesium phosphate	e) copper (I) chloride	f) potassium carbonate
g) sodium bicarbonate	h) ammonium nitrate	i) barium hydroxide
j) ammonium oxide		

3) Name the following compounds:

CuSO_4	NaOH	Al_2O_3	SrCO_3
SnCl_4	V_2O_5	$\text{Mg}(\text{ClO})_2$	AlPO_4
LiNO_2	$\text{Pb}(\text{NO}_3)_2$	$\text{Zn}(\text{ClO}_4)_2$	CuCO_3

4) Name or give the formula for the following hydrates:

$\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$	calcium sulfate dihydrate
$\text{LiCl} \cdot \text{H}_2\text{O}$	sodium carbonate decahydrate
$\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$	copper (I) cyanide pentahydrate
$\text{Sr}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$	zinc hydroxide dihydrate
$\text{NH}_4\text{F} \cdot 3\text{H}_2\text{O}$	aluminum nitrate tetrahydrate

5) Determine which compound has the higher lattice energy and explain why:

MgO vs. CaO	KCl vs. CaCl_2
Al_2O_3 vs. AlCl_3	NaBr vs. MgBr_2