

G11 Chemistry: Class 4 Homework**MULTIPLE CHOICE: Circle the correct answer. [10 marks]**

1. Given that the ion ClO_3^- is named chlorate, what is the ion ClO_4^- named?
A) chloride
B) chlorite
C) hypochlorite
D) perchlorite
E) perchlorate
2. What is the formula for the ionic compound formed by calcium ions and nitrate ions?
A) Ca_3N_2
B) $\text{Ca}(\text{NO}_3)_2$
C) Ca_2NO_3
D) Ca_2NO_2
E) CaNO_3
3. What is the formula for the ionic compound formed by calcium and selenium?
A) CaSe
B) Ca_2Se
C) CaSe_2
D) Ca_3Se
E) CaSe_3
4. What is the formula for the ionic compound formed by magnesium and iodine?
A) MgI
B) Mg_2I
C) MgI_2
D) MgI_3
E) Mg_3I
5. Predict the formula for the binary compound formed between barium and phosphorus.
A) BaP
B) Ba_2P
C) BaP_2
D) Ba_2P_3
E) Ba_3P_2

6. Which is the correct formula for copper(II) phosphate?

- A) Cu_2PO_4
- B) $\text{Cu}_3(\text{PO}_4)_2$
- C) Cu_2PO_3
- D) $\text{Cu}(\text{PO}_4)_2$
- E) $\text{Cu}(\text{PO}_3)_2$

7. The chemical name for ClO_3^- is chlorate ion. Therefore, the name of HClO_3 is

- A) hydrochloric acid
- B) chloroform
- C) hydrogen trioxychloride
- D) chlorous acid
- E) chloric acid

8. The formula for magnesium sulfate is

- A) MnS
- B) MgS
- C) MnSO_3
- D) MgSO_4

9. The correct name for NH_4NO_3 is

- A) ammonium nitrate.
- B) ammonium nitrogen trioxide.
- C) ammonia nitrogen oxide.
- D) hydrogen nitrogen oxide.
- E) hydrogen nitrate.

10. Give the formula for cobalt(II) chlorate dihydrate.

- A) $\text{CoCl}_2 \cdot 2\text{H}_2\text{O}$
- B) $\text{CoClO}_3(\text{H}_2\text{O})_2$
- C) $\text{Co}(\text{ClO}_3)_2(\text{H}_2\text{O})_2$
- D) $\text{Co}(\text{ClO}_3)_2 \cdot 2\text{H}_2\text{O}$
- E) $\text{Co}_2(\text{ClO}_3)_3 \cdot 2\text{H}_2\text{O}$

1. Complete the following: [26 marks]

Chemical Name	Chemical Formula
Sodium hydrogen carbonate	
Potassium hypochlorite	
Sodium thiosulfate	
Sodium cyanate	
Tin (II) fluoride	
Zinc nitrate hexahydrate	
Nitrogen trichloride	
Sodium periodate	
Manganese (II) iodide	
Barium sulfate	
Magnesium carbonate pentahydrate	
Sodium hypochlorite	
Calcium phosphate	
	KClO ₄
	Al(NO ₂) ₃
	Ni(OH) ₂
	Ag ₃ PO ₄
	N ₂ O ₅
	CF ₄
	NiCl ₂
	Fe(IO ₄) ₃
	HIO ₂
	FeO
	NaHSO ₄
	K ₂ Cr ₂ O ₇
	PCl ₅

2. Balance the following chemical equations. **[20 marks]**