

Molecular (Covalent) Compound Nomenclature Worksheet

Name: _____ Pd: _____

Answer the following questions about writing names and formulas for covalent (molecular) compounds:

1. List the rules for naming covalent (molecular compounds).

2. How does naming covalent compounds differ from naming ionic compounds?

Name the following covalent (molecular) compounds:

- | | | | |
|-----------------------------------|-------|-----------------------------------|-------|
| 1. Cl ₂ O | _____ | 6. Cl ₂ O ₈ | _____ |
| 2. CBr ₄ | _____ | 7. XeF ₆ | _____ |
| 3. Cl ₂ O ₇ | _____ | 8. H ₂ O ₂ | _____ |
| 4. N ₂ O ₅ | _____ | 9. NO | _____ |
| 5. BCl ₃ | _____ | 10. P ₄ O ₆ | _____ |

Write the formulas for the following covalent (molecular) compounds:

- | | | | |
|-----------------------------|-------|--------------------------|-------|
| 1. tetraphosphorus decoxide | _____ | 6. dichlorine heptoxide | _____ |
| 2. diphosphorus trioxide | _____ | 7. carbon monoxide | _____ |
| 3. carbon tetrachloride | _____ | 8. disulfur decafluoride | _____ |
| 4. tetraiodine nonoxide | _____ | 9. selenium hexafluoride | _____ |
| 5. phosphorus pentabromide | _____ | 10. dinitrogen monoxide | _____ |

Complete the following table by identifying the type of compound then writing the name or formula:

Compound	Ionic or Covalent?	Name or Formula
1. calcium chloride		
2. Cl ₂ O		
3. tetracarbon decoxide		
4. MgBr ₂		
5. sodium nitrate		

Write the scientific name for the following covalent compounds:

Compound Formula	Common Name	Scientific Name
1. H ₂ O	water	
2. NH ₃	ammonia	
3. N ₂ O	Nitrous oxide	