

Name \_\_\_\_\_

Date \_\_\_\_\_

**Comprehension**  
**Section 4.2**

Use with textbook pages 193-197.

# Chemical names and formulas of covalent compounds

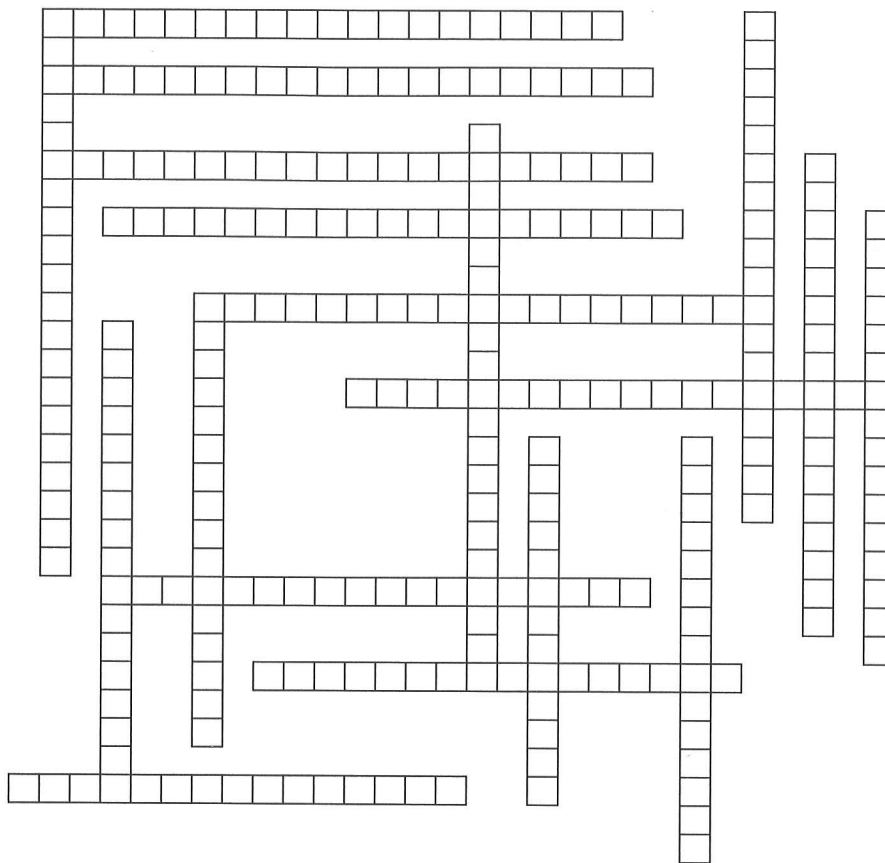
1. What is a covalent compound?  
\_\_\_\_\_
2. What type of bond is formed in a covalent compound?  
\_\_\_\_\_
3. What is used in naming covalent compounds?  
\_\_\_\_\_
4. Write the chemical formula for each of the following compounds.

(a) silicon dioxide _____	(i) dinitrogen pentoxide _____
(b) chlorine dioxide _____	(j) dinitrogen monoxide _____
(c) tellurium dioxide _____	(k) arsenic tetrabromide _____
(d) selenium trioxide _____	(l) arsenic pentachloride _____
(e) carbon disulphide _____	(m) disulphide pentoxide _____
(f) arsenic trichloride _____	(n) sulphur monochloride _____
(g) chlorine heptoxide _____	(o) phosphorus trichloride _____
(h) selenium difluoride _____	(p) diphosphorus pentoxide _____

5. Complete the following crossword puzzle. Given the chemical formula, what is the name for the covalent compound?

**COVALENT COMPOUNDS****Word List**

Arsoenic trioxide  
 Boron monoxide  
 Carbon disulphide  
 Chlorine monoxide  
 Diarsenic pentoxide  
 Dichlorine heptoxide  
 Dinitrogen trioxide  
 Disulphur dichloride  
 Iodine trichloride  
 Nitrogen dioxide  
 Nitrogen monoxide  
 Phosphorus tribromide  
 Silicon tetrafluoride  
 Sulphur tetrachloride  
 Tellurium dibromide  
 Tellurium trioxide

**ACROSS**

1.  $S_2Cl_2$
3.  $PBr_3$
5.  $SiF_4$
7.  $Cl_2O_7$
9.  $ClF_3$
11.  $N_2O_3$
14.  $TeBr_2$
15.  $ClO$
16.  $AsO_3$

**DOWN**

1.  $P_2O_3$
2.  $As_2O_5$
4.  $SCl_4$
6.  $ICl_3$
8.  $NO$
9.  $CS_2$
10.  $TeO_3$
12.  $BO$
13.  $NO_2$